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MEDICAL SECTION

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THE  
BRITISH JOURNAL  
OF  
PSYCHOLOGY  
MEDICAL SECTION

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# THE BRITISH JOURNAL OF PSYCHOLOGY MEDICAL SECTION

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## LA TENSION PSYCHOLOGIQUE, SES DEGRÉS, SES OSCILLATIONS<sup>1</sup>.

PAR PIERRE JANET.

### LA FORCE ET LA TENSION PSYCHOLOGIQUE<sup>2</sup>

#### I.

JE suis heureux que le Conseil Académique ait fait choix d'une étude psychologique pour cet enseignement commun. La psychologie est une science qui a toujours été honorée dans la Grande Bretagne: les philosophes Ecossais, les philosophes Anglais et aussi les romanciers Anglais nous ont bien souvent montré le chemin dans l'analyse de l'esprit humain. Les médecins psychiatres Anglais ont fait faire bien des progrès à la science de l'aliénation et nous comptons parmi eux des maîtres que nous aimons. Je me rappelle toujours avec émotion que lors d'un de mes premiers voyages à Londres dans ma jeunesse j'ai eu l'honneur et le plaisir d'être reçu en qualité d'hôte dans la maison du vénérable Dr Hack Tuke, le descendant de William Tuke, fondateur de la Retraite d'York. Son livre célèbre, *Influence of the Mind upon the Body*, avait été l'objet de mes premières études et j'étais heureux de trouver un accueil aussi aimable auprès d'un de mes maîtres. La psychologie est aujourd'hui plus importante que jamais et, on l'a dit bien souvent, le vingtième siècle sera le siècle des sciences de l'esprit. Que de problèmes sociaux, pédagogiques, judiciaires, médicaux ne trouveront leur solution que dans une psychologie vraiment scientifique et pratique!

Mais cette étude si importante se développe très difficilement, car son objet très complexe, mal défini, semble très différent de celui des

<sup>1</sup> Three lectures delivered before the University of London.

<sup>2</sup> First lecture delivered May 11th, 1920.

## 2 *La Tension Psychologique, ses Degrés, ses Oscillations*

autres sciences. Dans les nombreuses tentatives que j'ai dû faire pour rapprocher les études médicales des études psychologiques, pour enseigner à des médecins quelques notions psychologiques j'ai été amené peu à peu à me placer à un point de vue particulier qui me semble présenter quelques avantages. Permettez-moi de vous indiquer ce point de vue en expliquant sommairement dans ces trois leçons l'importance des notions de force et de tension dans l'interprétation des conduites humaines et en vous montrant la simplification que ces notions apportent dans la description des phénomènes normaux et des phénomènes pathologiques.

Les médecins sentaient depuis longtemps la nécessité d'une science psychologique, mais ils ne trouvaient pas dans la psychologie des philosophes le guide dont ils avaient besoin. Les philosophes à la suite de Descartes mettaient au premier plan le phénomène de la pensée intérieure et considéraient les actions, les mouvements du corps comme des conséquences secondaires de la pensée. Le médecin est habitué à regarder en dehors de lui son malade comme un objet que l'on voit et que l'on entend, il met au premier plan des caractères qu'il observe extérieurement et il ne sait comment mettre en rapport avec ses autres études des phénomènes purement internes conçus d'une façon toute différente. Il a bien essayé de construire une science psychologique sur le modèle de la physiologie qu'il connaissait et de mêler à la description des pensées le dessin des fibres et des cellules nerveuses. De belles études de psychophysiologie ont été faites et je n'ai pas à vous parler ici de la belle expérience de M. Head qui étudiait sur sa propre sensibilité les effets de la section d'un nerf sensitif. Mais ces études de psycho-physiologie qui ne sont nettement ni de la psychologie ni de la physiologie ne portent que sur un petit nombre de phénomènes très élémentaires, sur des sensations considérées comme très simples et laissent de côté l'essentiel de la vie psychologique; elles ne peuvent guère expliquer les troubles de l'esprit, les crimes ou les délires.

Sans critiquer le moins du monde la psychologie introspective qui reste peut-être la plus vraie au point de vue métaphysique, il faut avoir le courage de nous faire une psychologie à notre usage, pour nous qui avons besoin de nous préoccuper des nécessités de la pratique. Il nous faut considérer la psychologie d'une manière vraiment objective et pour cela changer le point de vue auquel on se place d'ordinaire. Pour le médecin, comme pour le naturaliste, le véritable objet de la psychologie c'est le phénomène extérieur qu'il voit chez ses malades, qu'il saisit par les sens exactement comme le physicien et le chimiste. Pour lui la

psychologie est la description et la classification des conduites humaines, des comportements de l'homme dans les différentes circonstances où il est placé et la pensée n'est qu'une de ces conduites, une attitude, un langage analogue à ceux que nous voyons au dehors, mais que ses proportions réduites nous dissimulent en partie. Le mouvement du corps et le langage ne sont pas la conséquence de la pensée, ils en sont le point de départ. Admettre que le psychologue médecin, je ne parle pas du psychologue métaphysicien, n'a rien à chercher en dehors de ces conduites c'est à mon avis le seul moyen de rendre la psychologie accessible à des médecins et de la replacer dans le cadre des sciences naturelles.

Une psychologie de ce genre commence à se constituer dans les travaux de ceux qui étudient la psychologie animale. Mais cette étude se borne d'ordinaire à la description des comportements élémentaires de l'animal. Les médecins aliénistes qui bien avant les naturalistes avaient déjà commencé cette analyse de la conduite ont besoin de pousser plus loin la même étude et d'aborder au même point de vue des conduites plus élevées, ces conduites supérieures que l'on considère comme caractéristiques de la vie humaine. Une psychologie vraiment médicale devra donc présenter sous forme d'actions et de conduites les opérations les plus élevées de l'esprit humain. Cela semble aujourd'hui difficile et en apparence inintelligible. Je pense cependant que cette œuvre pourra être réalisée grâce à une étude plus pénétrante du langage et de son rôle dans les actions de l'homme : c'est dans cette direction que devra se développer la psychologie pratique dont nous avons besoin.

## II.

Même en se plaçant à ce point de vue que le philosophe trouvera peut-être très restreint la psychologie a devant elle une tâche immense, car les conduites de l'homme sont innombrables et infiniment variées. Manger sa soupe aussi bien que fonder une famille, écrire un livre ou faire une conférence à l'Université de Londres, ce sont des conduites qui évidemment ne sont pas pareilles. Les morales, les littératures, les histoires signalent de telles masses de conduites que nous sommes débordés et que nous ne savons comment les aborder.

Les premiers psychologues, à l'exemple des philosophes du 18<sup>me</sup> siècle et des philosophes Ecossais, décrivaient ces actions en se plaçant à un point de vue que j'appellerai le point de vue de la qualité. Ils décrivaient autant d'actions différentes qu'il y a de mouvements différents : ils réunissaient les mouvements qui se ressemblent soit par leur point de départ soit par les organes qui interviennent, tous les actes d'alimenta-

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tion ou tous les actes où intervient le langage. C'est une classification nécessaire sans doute mais encore bien confuse.

Une notion que les médecins commencent à introduire dans la description des actes de leurs malades est la notion de force. Les philosophes convaincus que la pensée n'a pas de force et qu'elle plane au-dessus ont peut-être un peu trop négligé cette notion dans leur description de l'esprit. On trouve bien dans la psychologie de Spencer des remarques fort justes sur les actions qui mettent en jeu de gros muscles et celles qui sont constituées par le mouvement de petits muscles. Il explique par cette différence la prédominance des expressions dans les muscles de la face. Bien des philosophes ont insisté sur l'économie des forces qui résulte des opérations intellectuelles et ont considéré la science comme un procédé d'économie. Ces observations sont importantes mais sont bien disséminées et l'étude de la force des actes ne me semble pas avoir dans la psychologie la place qu'elle mérite.

Les observations de la psychologie pathologique nous obligent à donner beaucoup plus d'importance à la notion de la force dans les diverses conduites. Un grand nombre de troubles paraissent consister dans un affaiblissement de tel ou tel groupe de mouvements, par conséquent dans l'affaiblissement d'une fonction psychologique. C'est là le problème des diverses asthénies localisées. On connaît des épuisements de la sensibilité dont les plus intéressants sont les fatigues visuelles, les asthénopies, des affaiblissements permanents ou passagers des fonctions alimentaires, des fonctions sexuelles; les épuisements du langage, de l'attention, de l'émotion même sont très nombreux.

Plus intéressantes peut-être sont les faiblesses générales de toutes les fonctions psychologiques qui ont été si souvent décrites dans les études sur les neurasthénies, sur les diverses asthénies psychologiques. Sans doute dans ces états, comme j'ai essayé de le montrer à propos des psychasthéniques, il y a d'autres troubles que ceux de la simple faiblesse, mais il est important de constater et de distinguer les troubles de la conduite qui dépendent d'un affaiblissement.

La plupart des traitements des maladies nerveuses par le repos, par l'isolement dans des maisons de santé, par la dissociation des idées fixes et la liquidation des problèmes qui tourmentent l'esprit ne sont en réalité que des méthodes pour économiser les forces. "La plupart des névropathes sont des déprimés, des épuisés, leurs troubles mentaux tirent leur origine de cette faiblesse même. Si l'on me permet d'employer une comparaison empruntée au langage de la finance, toutes ces maladies ne sont au fond que diverses manières de faire faillite et de tomber dans



la misère, mais cette ruine, cette misère ne semble pas avoir chez tous le même point de départ. Les uns avaient dès le début des ressources insuffisantes, les autres étaient obligés par les circonstances de dépenser plus que leurs revenus. Beaucoup sont amenés à la ruine parce qu'ils ont constamment une certaine dépense supplémentaire à côté de leur train de vie ordinaire et que cette dépense cachée est trop considérable pour leurs ressources. C'est ainsi que nous avons compris les souvenirs traumatiques et un grand nombre d'idées fixes. La thérapeutique découle de cette interprétation, il faut fermer cette fuite: toutes les méthodes de désinfection morale n'ont pas d'autre but que de supprimer cette dépense inutile. Comme le malade n'est pas capable de le faire tout seul, il faut l'amener à liquider cette ancienne affaire qui le ruine et les revenus restants seront suffisants pour les dépenses de la vie courante<sup>1</sup>." La plupart des méthodes de traitement psychologique sont donc bien des méthodes d'économie qui d'une manière ou d'une autre essayent de conserver et d'augmenter les forces psychologiques du malade.

Il ne faut pas croire cependant que l'augmentation de la force soit toujours favorable: des faits bien curieux que j'ai réunis sous le nom des "paradoxes de l'agitation" montrent que les problèmes relatifs à la force psychologique sont bien plus complexes. Il n'est pas toujours exact que les névropathes et les aliénés fassent toujours immédiatement des progrès moraux quand ils ont été reposés et fortifiés. Moreau (de Tours) remarquait déjà autrefois que certains malades ont des délires furieux après une bonne nuit de sommeil et qu'ils restent calmes s'ils n'ont pas dormi. J'ai eu l'occasion dans mon dernier livre sur "Les médications psychologiques" de décrire bien des cas de ce genre<sup>2</sup>. Au cours de certains traitements reconstituants par des toniques divers on observe une augmentation de poids, une amélioration visible des forces qui permettent des actions plus puissantes, plus longues, plus rapides et en même temps une augmentation des souffrances, des obsessions, des délires.

Le fait inverse est encore plus intéressant: il nous montre une amélioration de l'état névropathique au cours des maladies débilitantes, après les dépenses épuisantes. La dernière observation que je viens de recueillir peut être considérée comme le type d'un très grand nombre d'autres. Un jeune homme de 35 ans était depuis plusieurs mois en pleine crise, incapable de toute action, tourmenté par les doutes, les sentiments de déchéance et de honte, et surtout par l'obsession de la mort et l'obses-

<sup>1</sup> *Les médications psychologiques*, 1919, II, p. 303.

<sup>2</sup> *Ibid.*, II, p. 93.

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sion de la folie, en un mot il était dans une grande agitation anxieuse. Il est atteint d'une angine non diphthéritique mais cependant très grave avec abcès du pharynx, températures de 39 et 40 pendant plusieurs jours, suppression à peu près complète de l'alimentation et il doit supporter fréquemment des petites opérations très douloureuses. Pendant ces semaines et pendant les suivantes il est extrêmement affaibli et peut à peine se tenir debout; mais il présente en même temps un changement radical et merveilleux. Il n'a plus aucune anxiété et quoiqu'il ait été réellement en danger il ne pense ni à la mort, ni à la folie, il accepte les traitements avec la plus grande confiance sans émettre aucun doute, il supporte courageusement les petites opérations très pénibles: "ces souffrances physiques, dit-il, ne sont rien à côté de mes anciennes souffrances morales," il prend facilement des résolutions importantes, en un mot tous les symptômes de la névrose semblent disparus. Les troubles psychologiques ne réapparaissent que trois semaines après la guérison de la gorge au moment où le malade semble reprendre ses forces.

On observe des faits analogues chez beaucoup de malades: une grippe, une fièvre typhoïde, un érysipèle déterminent une sédation étonnante des troubles nerveux. On connaît beaucoup d'observations de mélancoliques momentanément guéris par une fièvre typhoïde, d'obsédés anxieux tout à fait calmés par des maladies fébriles, d'épileptiques même très nombreux qui n'ont plus aucun accès pendant une pneumonie, ni pendant la convalescence. Après avoir constaté des faits de ce genre dans une de mes anciennes observations, j'avais supposé que dans quelques cas l'amélioration était due à la fièvre, à une excitation en rapport avec l'intoxication<sup>1</sup>. Cette explication ne convient pas à tous les cas, car l'amélioration est manifeste dans la période de convalescence quand les malades n'ont plus de fièvre et ne sont plus intoxiqués, mais quand ils sont encore affaiblis. Dans tous ces cas l'affaiblissement semble être une condition de l'amélioration morale<sup>2</sup>.

C'est là ce qui explique le phénomène si curieux de la décharge: bien des troubles nerveux, les crises convulsives, les crises de pleurs, les grandes agitations semblent être de grandes dépenses de forces. Comment se fait-il que souvent à la suite de ces phénomènes critiques on observe une certaine amélioration au moins apparente? Combien de fois ne voit-on pas des malades agités, anxieux, plus ou moins délirants qui tombent dans des crises convulsives, qui hurlent et se débattent pendant des heures, puis qui se relèvent sans doute avec une certaine fatigue,

<sup>1</sup> *Etat mental des hystériques*, 2me édition, 1911, pp. 558-609.

<sup>2</sup> *Les médications psychologiques*, 1919, II. p. 298.

mais avec un sentiment de calme délicieux, plus heureux et en réalité plus normaux qu'avant la crise<sup>1</sup>? Bien des femmes à la suite d'une émotion, d'un tracas quelconque sentent qu'elles ont besoin de remuer, de crier, de faire un exercice violent et déclarent qu'elles se porteraient bien mieux si elles pouvaient casser quelque chose.

Tous ces phénomènes nous montrent que la conduite est transformée tantôt par la diminution, tantôt par l'augmentation de la force et nous font sentir de quelle importance serait une étude précise de cette force psychologique. Malheureusement cette conception de la force dans les actes, dans la conduite est restée des plus vagues et il serait bien nécessaire de la préciser. Dans mes études je me suis borné à définir cette force par les variations de trois caractères, la puissance des mouvements, leur durée et leur rapidité. Des malades qui ne peuvent exécuter une action correctement que par des mouvements peu puissants, qui ne peuvent répéter l'action ni la continuer, qui n'agissent correctement que s'ils agissent lentement sont des malades psychologiquement affaiblis; ils reprennent de la force quand leur action tout en restant qualitative-ment la même prend les caractères opposés.

Je crois également qu'il serait bon dans les descriptions psychologiques de distinguer la force latente et la force vive. Certaines tendances qui ne sont pas activées possèdent cependant une grande force en réserve, en quelque sorte capitalisée. Cette force n'apparaît pas directement mais elle joue un grand rôle dans bien des faits psychologiques. Il y a une grande différence entre des malades qui semblent également déprimés suivant qu'ils ont ou qu'ils n'ont pas épuisé leurs réserves profondes. Chez les uns une certaine stimulation, de grands besoins, des dangers pourront faire appel à ces réserves et les tirer de leur latence, chez les autres toute excitation de ce genre restera inutile. Les forces vives sont au contraire des forces mobilisées qui doivent se dépenser immédiatement dans des actions plus ou moins complètes<sup>2</sup>. Les diverses émotions sont fort différentes suivant qu'elles éveillent et mobilisent des tendances plus ou moins puissamment chargées. C'est la considération de ces forces mises en mouvement devant être dépensées ou capitalisées de nouveau qui explique les phénomènes d'agitation aujourd'hui plus mal connus que les phénomènes de dépression. Il y a là une foule de problèmes des plus intéressants qui se rattachent à cette notion de force psychologique. Leur examen s'impose et leur étude doit être jointe à l'ancienne description purement qualitative des actions humaines.

<sup>1</sup> *Op. cit.* II. p. 300.

<sup>2</sup> *Op. cit.* II. p. 293.

## III.

Cette étude de la force des actes serait cependant bien insuffisante et les paradoxes de l'agitation viennent de nous montrer qu'elle ne peut expliquer les changements singuliers de la conduite humaine. Beaucoup de malades agissent avec force, ont des actions puissantes, prolongées, rapides et cependant présentent des troubles considérables qui montrent une altération grave d'une autre nature. Il y a dans l'action des propriétés qui peuvent être altérées par la maladie quoique la force reste intacte et quoique tous les mouvements considérés en eux-mêmes soient restés possibles. Il nous faut donc envisager certaines propriétés nouvelles de l'action qui lui donnent une perfection particulière.

Un caractère de l'action se présente alors à notre esprit et mériterait d'avoir dans la psychologie une importance considérable s'il pouvait plus facilement être vérifié, c'est le pouvoir de l'action ou, comme on l'a dit souvent, son "efficience" et la perfection de son adaptation. Les actions ont un but et la psychologie comme la physiologie ne peut se constituer sans une application perpétuelle de l'idée de finalité. Il s'agit toujours pour l'être vivant de conserver sa vie, de se protéger contre les influences dangereuses et d'étendre davantage sa puissance sur les êtres qui l'environnent. A ce point de vue les diverses actions ont des valeurs très inégales : certains actes, comme l'écartement du bras à la suite d'une pique ou d'un choc, sont des actions utiles sans doute mais d'une bien petite efficience. La pique ou le choc ne sont supprimés qu'un instant, ils peuvent recommencer immédiatement et il faudra un nouveau mouvement d'écartement qui devra se répéter jusqu'à l'épuisement. Ces actes ne protègent l'être vivant que dans une très petite étendue et dans un temps très court. L'animal qui est capable de se déplacer et de fuir à quelque distance fera un acte évidemment plus efficient car il se mettra à l'abri bien davantage et il aura élargi l'étendue où il peut vivre en sécurité. Les actions dans lesquelles entrent les souvenirs des dangers précédents, des précautions qui ont été utiles et les prévoyances de l'avenir seront au point de vue de l'adaptation encore plus parfaites car elles élargiront non seulement l'espace mais encore le temps pendant lequel l'être vivant protège sa vie. En général, car je ne puis entrer ici dans ces discussions philosophiques, le progrès de l'action me paraît étendre sa puissance dans l'espace d'abord, puis dans le temps. Les premiers êtres n'agissent que sur les objets immédiatement voisins, nous sommes parvenus à envoyer des obus à une centaine de kilomètres et nous pouvons télégraphier aux antipodes. Les esprits simples agissent



au jour le jour et sont tout au plus capables de préparer leur nourriture pour le lendemain, l'homme supérieur peut combiner des actions qui modifient la vie humaine pendant des années.

Si cela était possible, la psychologie devrait indiquer l'efficiencie de chacune de nos actions et devrait les ranger en série suivant qu'elles ont un pouvoir plus ou moins étendu. Cela est malheureusement bien difficile, car dans le succès d'une action interviennent bien des facteurs étrangers et nous ne savons pas toujours de quoi dépend le rôle de nos actions dans le monde. Il faut nous résigner à chercher des caractères plus apparents qui permettent de mesurer cette perfection des actions.

C'est alors que nous pouvons remarquer l'importance au moins apparente de la complexité des actes. Il y a des actions qui nous paraissent simples, quelle que soit la nature du mouvement exécuté et quelle que soit sa force. Sans doute de tels actes contiennent toujours une stimulation à la périphérie du corps, des phénomènes nerveux consécutifs et de nombreuses contractions musculaires. Mais cette complexité est physiologique, elle est à l'intérieur du corps, si on se place à l'extérieur du corps dans le domaine de la psychologie, on trouve que ces actions sont simples, car on ne peut pas les subdiviser sans qu'elles cessent d'être des actes, des faits psychologiques. Le mouvement d'écartement, l'acte de rapprochement du corps, les actions simples d'absorption ou d'excrétion sont de ce genre.

Il y a au contraire des actions évidemment complexes que nous pouvons subdiviser en groupes de mouvements qui sont encore des actions : poursuivre une proie, faire un voyage comportent énormément de petites actions successives ou simultanées qui sont rapprochées. Souvent il ne s'agit pas seulement d'une juxtaposition d'actions mais d'une combinaison d'actes dont chacun reste plus ou moins incomplet, plus ou moins transformé pour pouvoir s'associer avec les autres. J'ai essayé de montrer autrefois que les actes de l'intelligence élémentaire comme les actes relatifs au panier de pommes, au portrait, à l'outil, au chemin, etc. contenaient toujours au moins deux tendances combinées et maintenues à des niveaux différents d'activation. C'est pour cela sans doute que des actes de ce genre se présentent toujours sous un double aspect : remplir et vider le panier, faire et reconnaître le portrait, ranger l'armoire et sortir les objets de l'armoire, parce que tantôt l'une tantôt l'autre des deux tendances constitutives prédomine<sup>1</sup>. Dans d'autres cas les tendances réunies dans un seul acte sont encore plus nombreuses.

<sup>1</sup> "La tension psychologique," *Journal de psychologie normale et pathologique*, 1915, p. 167.

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C'est aussi à la complexité que l'on peut rattacher la différence frappante que l'on constate entre les actions effectuées sans conscience, avec distraction et les actions accompagnées de conscience personnelle, c'est à dire compliquées par la réaction personnelle qui est l'essentiel de la conscience. C'est aussi à cette observation qu'il faut rattacher la difficulté des actions sociales. Une action faite quand on est seul est toujours plus simple et plus facile qu'une action faite devant témoins. La présence d'autres hommes quand on la perçoit, apporte toujours de la complication à l'action et cette complication va croissant dans les diverses actions sociales: l'acte accompli devant des spectateurs est plus simple que l'obéissance, l'obéissance quoique déjà plus compliquée est plus simple que le commandement et surtout plus simple que la collaboration qui demande des alternatives de commandement et d'obéissance. C'est pourquoi il ne faut pas se figurer que l'on rend toujours une action plus facile quand on prétend aider celui qui agit. Très souvent cette aide complique énormément l'action et tel malade peut encore faire une action quand il est tout seul, mais en devient incapable quand une autre personne veut le regarder, le surveiller, le commander et surtout l'aider.

La complication ne signifie pas seulement la multiplicité des actions successives ou simultanées qui sont déclenchées à la suite d'une seule stimulation, elle implique un autre caractère, c'est l'unité de la combinaison. Certains individus nous semblent faire des actions nombreuses, séparées les unes des autres ayant chacune une courte étendue dans l'espace et dans le temps: un petit oiseau vole, se pose, saute quelques pas, mange un grain, pousse un petit cri, selon des circonstances extérieures et accidentelles sans que tous ces actes semblent réunis entre eux. D'autre part nous savons que des hommes peuvent préparer un projet d'avenir, le caresser pendant des mois et des années, y subordonner toutes leurs actions, employer leur vie à le réaliser: les actions sont alors étroitement réunies par une certaine unité. De quoi dépend cette unité? Il est probable qu'une certaine tendance est maintenue présente à un degré d'activation plus ou moins complet pendant toute la série des actions partielles qui sont modifiées par sa présence. Mais peu importe en ce moment: il nous suffit de constater ce degré plus ou moins grand d'unification des actions complexes. C'est ce caractère qui se retrouve dans une foule de phénomènes psychologiques, dans la réflexion prolongée, dans le projet, dans l'essai, dans la recherche scientifique, dans une foule d'actions importantes et puissantes.

Une autre notion doit s'ajouter à ces remarques sur les degrés de complication de l'action, c'est la notion de l'évolution des tendances.

Les tendances qui constituent l'esprit n'ont pas toutes été formées au même moment: les unes sont bien plus récentes que les autres. Il y a en nous des tendances anciennes contemporaines des premiers animaux, d'autres ont été acquises par les premiers hommes, certaines acquisitions sont de date récente et enfin certaines actions sont transformées par nous-mêmes dans le moment présent. Ces diverses tendances à des actes de plus en plus compliqués et de plus en plus récents se superposent les unes aux autres à propos d'un même objet. Il semble en apparence qu'il s'agit d'une seule et même fonction qui se complique de plus en plus. Toutes les fois que les hommes prennent de la nourriture, il s'agit en somme de l'acte de manger. Mais cet acte de l'alimentation ne reste simple que dans des cas très particuliers; il se complique très vite si nous devons manger devant d'autres hommes et en même temps qu'eux, il peut devenir très délicat quand il doit se faire suivant certaines règles du savoir vivre et quand en le faisant nous nous exposons à la critique des autres. C'est ce que je montrais autrefois quand j'essayais d'indiquer combien la simple alimentation diffère de l'acte de dîner en ville en portant un habit noir et en parlant à sa voisine. Il en est de même pour les actes génitaux qui ont une base très simple et très ancienne et qui se compliquent à l'infini par l'addition de tendances sociales, puis d'actes intellectuels à propos de conséquences possibles, puis de tendances à la critique morale, etc. On croit qu'il s'agit toujours de la même action, mais en réalité l'acte s'est transformé en se perfectionnant et en devenant plus adapté par l'évolution. Il a pris une perfection toute particulière, bien distincte de sa qualité primitive et même de sa force.

Si tous ces caractères d'efficience, de complexité, de systématisation, d'évolution étaient bien connus à propos de chaque action, il serait facile d'apprécier l'acte et de noter son degré de perfection. Mais toutes ces études sont rudimentaires et encore bien difficiles, aussi me semble-t-il intéressant d'insister sur une méthode d'observation qui peut en pratique nous renseigner assez bien sur le degré d'évolution des actes et sur leur degré de perfection psychologique.

Nous observons facilement par l'étude des diverses maladies mentales que les tendances les plus récentes sont de toutes les plus fragiles. On s'étonne à tort de voir qu'un malade ne modifie pas ses convictions par l'expérience des succès, de constater qu'il est inaccessible à l'expérience. L'aptitude à modifier ses tendances non par l'habitude, mais par un petit nombre d'expériences auxquelles on attribue une grande force, est une disposition très récemment acquise, qui n'est même pas encore

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égale chez tous les hommes et qui disparaît très aisément. On parle sans cesse des troubles de la mémoire, de l'incapacité de fixer des souvenirs nouveaux, de la maladresse pour utiliser les souvenirs, pour appeler au secours dans une situation présente tous les souvenirs qui s'y rattachent. Mais il faut bien comprendre que la mémoire est une opération fort élevée et tardive et que l'usage de la mémoire personnelle dans la conduite est une sorte de méthode expérimentale qui s'est développée plus tard encore et que toutes ces opérations fragiles sont très aisément atteintes par la maladie. Les actes compliqués et systématisés sont atteints de la même manière: nous venons de voir que l'alimentation et les actes sexuels se sont infiniment compliqués, c'est pourquoi il y aura si facilement des troubles du dîner en ville, c'est pourquoi il y aura toute une pathologie des fiançailles et du voyage de noces. Enfin il est évident que la maladie réduit l'efficacité des conduites: le malade est de plus en plus incapable d'étendre son action dans l'espace et dans le temps et à la fin le dément ne peut même plus entretenir sa vie sans le secours des personnes qui l'entourent.

Si les actes les plus élevés et les plus parfaits disparaissent les premiers, au contraire les actes primitifs et simples subsistent plus longtemps et souvent se présentent même avec une force plus considérable. M. Head nous a montré dans un domaine plus restreint où les vérifications scientifiques sont plus précises la disparition de la sensibilité épique et la persistance ou même l'augmentation de la sensibilité protopathique dans les altérations du système nerveux. Au fond c'est là un fait bien simple: après les terribles bombardements qui ont dévasté nos villes, les toits des maisons et les étages supérieurs sont détruits mais les caves subsistent et prennent même plus d'importance car on se met à les habiter. Inversement quand la maison se reconstruit ou quand les maladies mentales se guérissent et que les fonctions mentales se restaurent, on voit les caves et les fonctions inférieures perdre de leur importance, on voit au-dessus réapparaître les actes plus compliqués et plus récents et enfin les plus parfaits viennent restaurer le sommet de l'édifice.

Ces études sur les décadences graduelles et les restaurations progressives au cours des maladies de l'esprit peuvent nous procurer une méthode pour apprécier la valeur de telle ou telle opération psychologique dont nous apprécions mal la complexité et l'évolution. Prenons comme exemple les opérations psychologiques si importantes qui sont caractérisées par le travail. Nous verrons dans notre prochaine leçon que le travail joue un rôle considérable dans une foule de conduites. Il est facile de rechercher ce que deviennent ces conduites du travail chez les



malades qui ont des névroses périodiques avec abaissement et relèvement progressif et régulier de l'esprit. Le travail est troublé ou disparaît dans la plupart des névroses dépressives et cela dès le début. Les tics professionnels, les phobies et les obsessions professionnelles, les aboulies professionnelles sont bien connues. Dès que la dépression est profonde, tout travail devient impossible et cependant bien des opérations psychologiques, le raisonnement, l'imagination, le langage, les perceptions subsistent parfaitement. D'autre part, quand le malade se relève, le travail réapparaît graduellement en passant d'une manière inverse par les mêmes phases qu'au début. N'est-il pas logique d'en conclure que le travail est une opération compliquée et tardive qui s'élève au-dessus de la plupart des autres opérations psychologiques? La même étude peut être faite sur les autres opérations mentales, soit chez les mêmes malades, soit chez ceux qui présentent des abaissements profonds et subits dans des syncopes, dans des accès épileptiques et chez lesquels on peut assister au réveil, au relèvement graduel des fonctions.

Ce sont ces diverses études d'analyse psychologique, d'histoire de l'évolution humaine et d'observation médicale qui peuvent nous fournir les éléments du tableau hiérarchique des tendances psychologiques. Ce tableau si important disposerait toutes les actions les unes au-dessus des autres suivant leur ordre de perfection et d'évolution. Sans doute nous rencontrerons bien des difficultés, car les actions humaines peuvent prendre bien des aspects différents: une action inférieure peut simuler une action supérieure qui est en réalité absente, la même action peut ne pas avoir la même valeur chez tous les hommes. Mais toutes ces difficultés peuvent être diminuées par des examens soigneux et des comparaisons suffisamment larges et on trouvera que les grandes lignes de cette hiérarchie sont à peu près les mêmes chez tous les hommes.

Nous rencontrons également bien des difficultés quand nous essayons d'appliquer ces notions sur la valeur hiérarchique des actes à des conduites complexes prolongées pendant un certain temps. Ces conduites contiennent des actes nombreux qui semblent être de valeur inégale. Il est probable cependant que ces diverses actions sont moins différentes qu'elles ne paraissent et qu'elles appartiennent pour la plupart à un même niveau. Il faut d'ailleurs tenir compte surtout du niveau des actes les plus élevés qui donnent leur caractère à la conduite considérée. D'autre part tous ces actes surtout les plus élevés ne sont pas toujours terminés et n'arrivent pas toujours à leur activation complète: une tendance à la réflexion, à l'effort moral qui reste à l'état imparfait de désir n'a pas la même valeur qu'un acte de réflexion ou de travail entièrement

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effectué. Je ne fais que signaler ces difficultés d'appréciation, car je crois qu'elles peuvent être surmontées et qu'il est très important d'apprécier les conduites à ce point de vue.

Il nous faut donc ajouter à la notion de la hiérarchie des tendances celle de la tension des conduites ou de la tension psychologique en général. Il y a des conduites de basse tension dans lesquelles des tendances inférieures sont seules en exercice et des conduites de haute tension qui réclament la mise en jeu de tendances élevées dans la hiérarchie et leur activation complète. Un esprit aura une faible tension quand il sera forcé de se contenter souvent des actions du premier genre, il aura une forte tension quand il exécutera facilement et fréquemment des actions du second genre. Il y aura d'ailleurs entre ces deux extrêmes d'innombrables intermédiaires. D'une manière générale le degré de la tension psychologique ou l'élévation du niveau mental d'un individu dépend du degré qu'occupent dans la hiérarchie les tendances qui fonctionnent en lui et du degré d'activation auquel il peut porter les plus élevées de ces tendances. Ainsi entendue la tension psychologique joue un rôle extrêmement important dans l'interprétation des conduites normales ou pathologiques et dans l'intelligence des caractères.

Pour ne prendre que quelques exemples, la mesure de cette tension nous permettra de déterminer les conduites de même niveau qui seules peuvent être comparées entre elles et considérées comme équivalentes<sup>1</sup>. Elle permettra surtout de comprendre les lois de la force psychologique, car la force mesurée seule ne donne aucun renseignement précis sur la valeur d'une conduite et nous amène à ces contradictions bizarres que nous venons de signaler. Comme je le disais dans mon dernier livre, Il est probable que dans la conduite normale chez des individus bien équilibrés une certaine relation doit être maintenue entre la force disponible et la tension et qu'il n'est pas bon de conserver une grande force quand la tension a baissé, il en résulte de l'agitation et du désordre<sup>2</sup>. Une comparaison permet d'illustrer cette loi peu connue : des individus qui n'ont pas l'habitude de l'ordre et de l'économie ne savent pas se conduire et font des actes dangereux s'ils ont entre les mains tout d'un coup une grosse somme d'argent. "Si je me suis abominablement enivrée," me dit une pauvre femme, "c'est la faute de mon patron qui m'a remis à la fois 70 francs : je ne puis tolérer à la fois que 25 francs, que voulez-vous, 70 francs je ne sais qu'en faire, alors je les bois." La tension psychologique grâce à l'exécution des actes élevés qui sont coûteux et avantageux,

<sup>1</sup> *Les médications psychologiques*, 1919, II. pp. 18, 19.

<sup>2</sup> *Op. cit.* II. pp. 301-303.

grâce à la mise en réserve qui résulte des derniers degrés de l'activation permet d'utiliser de grandes forces disponibles. Mais quand cette tension reste faible il vaut mieux ne disposer que de petites forces et par conséquent il est dans certains cas avantageux de dissiper les forces surabondantes d'une manière quelconque afin de rétablir la proportion entre la force et la tension. Telle est l'idée générale de la décharge qui doit jouer un rôle important dans l'interprétation de beaucoup de phénomènes pathologiques.

Cette influence de la tension sur la répartition des forces semble dépendre de ce fait c'est qu'une action élevée dépense de la force et l'emploie d'une manière particulière. Quand une action est supérieure à une autre la force qu'elle exige pour s'accomplir semble être bien supérieure à celle qui est nécessaire pour l'acte inférieur. On peut le constater en étudiant le phénomène si curieux de la dérivation où des actes très nombreux dépensant une force considérable semblent remplacer un seul acte supérieur en apparence très simple qui n'a pas pu être exécuté<sup>1</sup>. Sans doute les actes de haute tension qui semblent si coûteux peuvent dans certains cas devenir dangereux et déterminer de l'épuisement. Mais d'autre part ces actes supérieurs, quand ils peuvent être exécutés correctement, non seulement modifient le monde d'une manière puissante et durable, mais encore transforment l'esprit, arrêtent les agitations et déterminent la formation des tendances nouvelles: quoique coûteux ils constituent un placement des plus avantageux.

Ces considérations un peu terre à terre me semblent aujourd'hui nécessaires dans une étude psychologique qui puisse devenir pratiquement utile. Les applications pratiques de la psychologie réclament avant tout une description et une analyse des conduites et des actes qui les constituent. Ces actes ne doivent pas seulement être étudiés dans leur qualité, mais encore dans leur force et dans leur degré de perfection. De telles études sont encore à leur début et j'ai simplement essayé de vous en indiquer l'intérêt.

<sup>1</sup> *Op. cit.* II. pp. 78, 79; cf. *Obsessions et psychasténie*, 1903, I. p. 559.

## THE REVIVAL OF EMOTIONAL MEMORIES AND ITS THERAPEUTIC VALUE. (I)<sup>1</sup>

BY WILLIAM BROWN.

THE subject of this discussion is: "The revival of emotional memories and its therapeutic value." It is an important question, because the method of bringing up earlier memories and working them off has become more and more the approved method of treating the psychoneuroses. What we want to know is the 'rationale' of this method—the kind of hypothesis that would best harmonize it with the general principles of Psychology.

We might begin with the facts. It has been found again and again in the case of shell-shock patients, especially those seen in the field, that they suffer from loss of memory of the incidents immediately following upon the shell-shock, and that, if these memories are brought back again afterwards with emotional vividness—hallucinatory vividness, I might say—the other symptoms which they were showing tend to disappear. The degree of the recovery varies from case to case, but one does notice, in many cases, complete recovery. All cases of loss of voice, for example, seem curable by this means, without exception. In the case of functional paralysis movement in the paralysed limbs occurs, but not necessarily complete recovery of muscular power at first<sup>2</sup>.

The essential thing seems to be the revival of the emotion accompanying the memory. This was easily brought about in the case of shell-shock soldiers seen in the field shortly after their injury. It was more difficult to produce the emotional revival in patients seen later in England. One patient suffering from functional deaf-mutism, whom I saw in England, recovered all his memories when hypnotised by me on several occasions, but did not regain his voice or hearing until, at last, he woke up at night from a very vivid dream, tumbled out of bed, and both heard and spoke. In the case of deaf-mutes treated in the field such failure never occurred. The explanation seems to be that, in this case, I did not produce the emotional revival with sufficient vividness.

Considered in a rough, popular manner, the facts seem to indicate

<sup>1</sup> A contribution to a discussion at a meeting of the Medical Section of the British Psychological Society on February 18, 1920.

<sup>2</sup> Cf. my article, "Treatment of Cases of Shell Shock in an Advanced Neurological Centre," *The Lancet*, 1918, II. 197. Also "War Neurosis," *Proc. Roy. Soc. Med.* 1919, XII.

that emotion has been pent up in these patients, under strain of attempted self-control, and that liberation of such pent-up emotion (known as 'abreaction') produces a resolution of the functional symptoms. Another obvious factor, of course, is the re-synthesis of the mind of the patient—the amnesia has been abolished, and the patient has once more full sway over his recent memories.

Can we say that the emotion the patient experiences under hypnosis is identical with the emotion that he felt, or began to feel, at the time of the mental shock? An alternative view might be that the circumstances of the original shock are brought so vividly and cognitively to his mind under hypnosis that they again arouse an emotion of fear, but an emotion which is a present emotion, which may be less intense, but quite possibly may be more intense and of different quality from that which he originally experienced, or began to experience. According to the James-Lange theory of emotion this latter explanation would be the more probable one. The adherents of this theory might hold that a complex of visceral and other sensations is aroused at the time of the hypnosis through the mediation of the cognitively-revived experience, and so forms the present emotion. But psychologists find it impossible to accept the James-Lange theory, since an emotional experience is always more than a sum of organic sensations, in that it involves a reference, vague or explicit, towards some object, in the psychological sense of that word. All the evidence quoted from pathology in favour of the theory—from cases of visceral anaesthesia on the one hand and heightened emotionality on the other—equally fails to prove the absence of this subject-object relationship in any single case.

Hypnotic experiments in the revival of early memories of childhood seem to confirm one in the view that the emotional tone of the individual experiences is retained in the mind in the same way in which those experiences themselves are retained, so that, although the mind becomes more and more complex in various ways in course of time, and various experiences, that later on leave their traces in memory, interact, as it were, with one another and produce more complex mental formations, there is at least a continuous thread of actual experience being deposited in memory from moment to moment, like the successive photographic views on a cinematograph ribbon, and these early memories can be revived in the exact form in which they were originally laid down as the mind passed beyond them to new experiences. I will quote one case to illustrate what I mean. In one of my patients I recalled under hypnosis the events of his sixth birthday. He proceeded to live again through the



exact experience. His face lighted up with joy as he saw the birthday presents that his father and mother had given him. A moment later he commences to weep bitterly, because he remembers that his little sister is very ill upstairs, and that the doctor has just been. A fortnight later, when testing his memory for other early events, I inadvertently suggested once more the revival of those of his sixth birthday, forgetting that I had done so before. He went through exactly the same experiences, his emotion of joy giving place later to the emotion of desperate grief. The two revivals were practically identical. Here it seems as if the two different emotions were integral elements in the successive memories, and that they were certain to come up if the memories were revived in their ideational completeness.

As against facts like these, we find instances where, at one time, an early emotional experience can be revived cognitively in great detail without the accompanying emotion, whereas, on other occasions, the same attempt at revival inevitably re-arouses the emotion as well. We must assume here, either that our cognitive memories form systems of mental dispositions linked up with, but nevertheless relatively independent of, other mental dispositions corresponding to the different primary and secondary emotions, as Dr W. McDougall suggests in Chapter III of his book on Psychology (Home University Library), or else we must assume that the cognitive revival without emotion has simply been incomplete revival, and that, if the revival had been sufficiently detailed, had possessed hallucinatory vividness, the emotion would have been revived simultaneously.

In certain cases of emotional memories one finds, as a matter of experience, that there does seem to be an over-burdening of the memory with emotion, and that this excessive emotion can be worked off by revival, with relief to the patient's mind (psycho-catharsis). If the same emotional experience is again aroused later, he no longer shows such excessive emotional reaction.

Freud has likened emotional energy to an electric charge, which can spread over the surface of a body, and can shift from one part to another; emotional energy, in a similar manner, shifting from one memory to another, or gaining physical outlet in emotional reaction, muscular, visceral and vaso-motor.

McDougall's theory of the structure of the mind and his hypothesis of different mental dispositions, of cognitive knowledge on the one hand and the various emotions on the other, give us a different view of the psychological situation. According to his view one can indeed under-

stand the therapeutic results of sublimation, where emotional dispositions, that have originally found an outlet through association with certain sets of cognitive dispositions, can later on become associated with other cognitive dispositions and function in connection with them to the partial or complete exclusion of the former cognitive dispositions.

As regards the simpler phenomenon of 'abreaction,' I have myself suggested a similar explanation, which I stated as follows: "It seems to me that we have a two-fold dissociation in these cases (shell-shock of hysterical type). In the first place, the shock of the shell explosion has produced a dissociation from the patient's personal consciousness of certain psycho-physical functions together with the memories linked with them immediately after the shock. But a second dissociation has also occurred, viz. that between the psychical (I should have written 'psycho-physical') and physical counterparts of the emotional reaction of fear. The physical counterpart then persists instead of being evanescent. The first dissociation has to do with the central nervous system, the second has to do with the sympathetic. Revival of emotion with hallucinatory vividness, soon after the original shock, abolishes the second dissociation as well as the first, and so brings the physical manifestation of the emotion again under the sway of the conscious personality<sup>1</sup>."

But although such associational theories are as far as we can go on the psycho-physiological plane of explanation, psychologically we are forced to recognise the great therapeutic effect produced by the intellect in the analytic review of past memories, especially in the analytic treatment of what have been called 'anxiety states,' where the patient is helped and encouraged to look at past events from a more impersonal point of view, and so to obtain a deeper insight into their mutual relations and intrinsic values. The method, which might be called the method of *autognosis*, does produce a readjustment of emotional values among the patient's past memories. These memories are all scrutinized from the point of view of the patient's developed personality—or rather of his ideal of personality so far as it becomes revealed in the course of the analysis—and the relative autonomy that some of them had previously enjoyed by virtue of their emotional over-emphasis is withdrawn from them. The progress is one from a state of relative dissociation to a state of mental harmony and unity. The 'abreaction' of excessive emotion here is no merely mechanical process, but is controlled at every step by the principle of relativity and intellectual adjustment.

<sup>1</sup> "Hypnosis, Suggestion and Dissociation," *Brit. Med. Journ.* June 14th, 1919.

## THE REVIVAL OF EMOTIONAL MEMORIES AND ITS THERAPEUTIC VALUE. (II)<sup>1</sup>

By CHARLES S. MYERS.

I SUPPOSE I was the first (in a paper written by me in France during the autumn of 1914) to lay stress on the excellent results of immediate attention to the amnesia in cases of 'shell-shock.' I began then to employ this principle of treatment not only for the cure of functional bodily disorders, but also and especially in order to alleviate the depression, the fear of insanity and the other mental disturbances associated with the amnesic state—in other words to bring the patient completely to 'himself' again. Since that time I always tried to encourage the adoption of this line of treatment in the various neurological hospitals with which I became connected. In the case of Dr Brown's wards, such encouragement was superfluous, for his previous psychological training had at once shown him the importance of dealing instantly with the amnesic symptoms of his patients. He and I, however, came finally to take up somewhat different points of view in regard to this treatment. Owing, perhaps, to his more frequent use of hypnosis in recovering lost memories, he was led to think that the revival of *emotional expression* was the most important element, while my own experience, in recovering memories both in the waking and in the hypnotic state, was that the acting out of the emotional experience was of relatively little consequence, but that what was of importance was the revival of the unpleasant memory of the scene, *i.e.* the revival of the dissociated *affective* and *cognitive* experience. Indeed I used to discourage undue prominence of the emotional response during the recollection in hypnosis of what had been forgotten, because I always used hypnosis at so slight a stage that my patients would complain of headache and wake up rather than allow their emotion full play. I therefore made a practice of using such persuasions as—"Now when I put my hand on your forehead, you will be back in the trenches again, but you will *not be unduly afraid*, you will be able to live through it all again *calmly* and to tell me all that happened to you." Unfortunately no opportunity occurred for a satisfactory comparison of these two methods of treatment in France, although I endeavoured more than once to get such an inquiry started. But I never had reason to suppose that my principle of treatment was in any way less effective than Dr Brown's. I could quote numerous instances of

<sup>1</sup> A contribution to a discussion at a meeting of the Medical Section of the British Psychological Society on February 18, 1920.



recovery in favour of my view that it is the recall of the repressed scene, not the 'working out' of the 'bottled up emotional energy' (to use Dr Brown's terminology), which is responsible for the cure.

I had many opportunities, of course, during my duties in France, of seeing Dr Brown at actual work on his own lines. And I should like to take this opportunity of stating that his most uncompromising opponent could not point to a hospital where the functional nervous cases presented a more satisfactory physical appearance or where so many were returned direct to duty and fewer were sent down to the base hospitals. Now both in his patients and occasionally in my own, I have seen the emotions of fear, terror and even anger in full force during the return of these memories under hypnosis. But I seldom found myself in agreement with Dr Brown, that these were emotions which had not been previously felt and displayed in the trenches. In some cases, I am ready to admit, the patient had probably exercised stronger control over their expression when in the firing-line. But generally I believe that what we obtained in such cases during hypnotic revival was a literal re-enactment, a living through again, of the scenes and experiences of actual warfare accompanied by their original excitement.

Having thus stated the difference in our point of view, I pass on to raise questions for discussion. The first question for discussion seems to me this: Do emotions become repressed, and if so in what direction does the repression act? Dr Brown will be the first to agree that the emotion must be distinguished from its expression. In cortico-thalamic lesions, the most striking effect of the release of the thalamus from cortical inhibition is the exaggerated *affective* experience, the increase of pleasure and discomfort on the side affected. But an *emotional* increase limited to one side of the body is clearly inconceivable, although increased unilateral response to emotional excitement has been observed in such cases by Head and Holmes. It may be doubted, however, whether increased emotional response generally means increased emotional feeling. And it is, I gather, the control exercised over emotional expression rather than the control exercised over emotional feeling on which Dr Brown bases the rationale of abreaction. For him the 'bottling up' of emotional expression is the prime cause of dissociation. To this I shall return immediately.

Let us next turn to what Freud has termed the psycho-pathology of every-day life. What is it we are prone to forget? Is it always or primarily the emotional? No, it is the unpleasant which becomes repressed. Turn again, conversely, to the every-day involuntary persistent return of bygone experiences to consciousness. It is the extraordinarily pleasant

or unpleasant scenes that insist on obtruding themselves, not the emotional ones, *quâ* emotional. An emotion does not in every-day life return apart from association with some content; once aroused, it may, of course, persist as a mood.

For these reasons I submit that there is an inherent probability that the cause of functional amnesia is not repression of the emotional, but repression of the affective component. The scene is too intolerably unpleasant to be revived; and the resistance to recall is, *ceteris paribus*, a measure of the unpleasantness.

A careful distinction must be made between dissociation, as a process of disintegration, and repression, as a process of inhibition. The two often concur, but are not therefore to be confused or to be regarded as identical. Thus, dissociation can hardly occur without the subsequent inhibition of what has become dissociated—any more than association can hardly occur without facilitation of what has become associated. The common view is to regard all dissociation as the consequence of conflict and attempted repression. For Freud the conflict occurs between wishes, for Dr Brown between emotions. But I do not think that in cases of 'shell-shock' conflict and attempted repression *necessarily* precede dissociation. Efforts at repression certainly weaken previous self-control, produce anxiety and in this way conduce to dissociation. But in many, if not in most, cases of shell-shock, I think the essential pathological process consists in a dissociation affecting the entire personality owing to sudden emotional shock. The soldier is no longer 'himself'; and with the return of his apparently normal 'self,' repression occurs and that repression is primarily confined to the affective and cognitive sides, and only to the emotional so far as it is associated therewith. It is the affective-cognitive aspect which receives censure and is repressed. The memory of the actual scene hardly ever escapes from its repression. Not so the emotion. It is merely dissociated and may repeatedly disturb the waking and sleeping life of the patient in many well-known ways.

These are the principal lines of thought that Dr Brown's views have suggested to me. They incline me to the conclusion that the value of 'autognosis,' to use his expressive term, consists in relieving the affective-cognitive repression and in reintegrating the various dissociated components, not, as Dr Brown maintains, in securing emotional revival. I am disposed to doubt whether attempted control over emotional expression ever leads directly to functional nervous disorder, and whether dissociation of emotion or emotional expression ever occurs, save indirectly through dissociation and repression of the cognitive and affective experiences linked thereto.

## THE REVIVAL OF EMOTIONAL MEMORIES AND ITS THERAPEUTIC VALUE. (III)<sup>1</sup>

By W. McDOUGALL.

DR BROWN's paper raises some very difficult and important questions which go far beyond that of the therapeutic value of 'abreaction.' But it is best to keep this question to the front, or our discussion may become too diffuse.

The immediate practical question is—Does 'abreaction,' the revival of the emotion which is presumed to have accompanied the disturbing experience and to have played some part in bringing on the neurotic symptoms—does this, in itself, relieve the symptoms or play any direct and essential part in curing the disorder?

Those who return a positive answer to this question seem to take their stand on two distinct grounds.

(1) They claim to have observed that relief of symptoms does often follow immediately upon such 'abreaction.'

(2) They offer an explanation of this relief; which explanation, they claim, renders the alleged facts intelligible and brings them into line with more general principles of the mental life. The more general principle chiefly concerned is the Freudian conception of an emotion as a *quantum* of energy, comparable to a charge of electricity which may become attached to any idea, and may remain so attached through long periods of time without giving any sign of activity or change, or may become detached from one idea and re-attached to another, giving to it dynamic properties and various capacities for playing havoc with the life of the patient<sup>2</sup>. Some such conception of the emotions seems to underlie the Freudian principles of 'transference,' 'transposition' and 'sublimation' as well as 'abreaction.'

Those of us who are not inclined to accept Prof. Freud's every suggestion as established truth will feel that this way of conceiving emotions smacks too much of the old theory of ideas, according to which an idea is an entity capable of being somehow stored in the mind and brought out

<sup>1</sup> A contribution to a discussion at a meeting of the Medical Section of the British Psychological Society on February 18, 1920.

<sup>2</sup> I find it difficult to ascertain whether or how far the principle of 'abreaction' continues to figure in orthodox Freudianism. Pfister in his 'Psycho-analytic Method' seems to attach importance to it. Jung seems to have rejected the principle entirely.

for further use on successive occasions. And we shall fear that the acceptance of this way of describing the facts of our emotional life may lead to much the same difficulties, confusions and errors as those which are now generally recognised to be the inevitable results of the acceptance of the 'idea' theory.

Even if we accept this conception of the emotions, it does not seem to render the alleged therapeutic effects of 'abreaction' really intelligible. The explanation offered seems to be that the packet of emotional energy attached to an idea, although in many cases it may lie latent and harmless, does not so lie in the pathological cases; but, rather, works in a subterranean fashion to disorder, in various ways, the flow of mental life and bodily behaviour; and that in 'abreaction' this disturbing packet of energy is discharged from the system and so finally got rid of.

This notion, that every emotional memory implies the existence in the mind (or in the nervous system) of a separate and distinct packet of explosive energy, attached to an idea which serves the function of a detonator, this notion, I say, is on the face of it highly questionable and improbable. If we accept it literally, we shall have to regard some of our more emotional acquaintances as containing so many such packets of high explosive, that their continuance without sudden and complete disruption is a standing wonder.

And if we put aside this unsatisfactory feature of the notion of 'abreaction,' it is not easy to see why the mere re-living of the emotional experience should relieve the symptoms or cure the disorder. If living through a scene of horror produces a psycho-neurotic disorder, why should the living through it a second time cure or tend to cure it? On the face of it we might expect that the disorder would be accentuated by the repetition of the emotional experience<sup>1</sup>.

I am inclined to believe that this does actually occur in two classes of patients. First, there are those who, having suffered some severe shock, fall frequently into 'fits' and live through the experience again in these fits, in which the appropriate emotion recurs. These emotional displays, far from securing any 'abreaction,' seem to leave the patient's condition somewhat worsened, and they tend to become chronic and fixed<sup>2</sup>.

<sup>1</sup> I leave aside the question, touched on by Dr Brown and much discussed by some authors, namely—Do we, in remembering an emotional incident, experience the same emotion over again or merely remember the emotion? This question seems to be entirely unreal; as unreal as the question—When we remember an object, is the idea that comes to consciousness the same idea that we had when we thought of it on former occasions?

<sup>2</sup> As Dr Brown has pointed out, the clearing up of the symptoms becomes in general more difficult the longer they have persisted.



Secondly, there have been, I believe, a certain number of 'shell-shock' patients, who, having come into the hands of a medical officer who accepted the principle of 'abreaction,' have been put through their paces again and again, *i.e.* been made to live through the disturbing experience repeatedly in hypnosis, and have shown increase rather than relief of symptoms.

The crucial question for observation is—Does the revival of the emotion, the re-living of the emotional experience, in itself result in relief? Or is it not true that in all cases in which relief follows, there is also some recovery from some amnesia, paralysis, or other manifestation of dissociation? I am inclined to reply 'No' to the former question and 'Yes' to the latter. These answers are in accordance with my experience. What is the experience of others in respect to this question? Some of those who believe in the value of 'abreaction' have probably paid no attention to this question, being content to regard the overcoming of the dissociation as an effect of the emotional discharge. I suggest that this is a false assumption; that the essential therapeutic step is the relief of the dissociation; and that the emotional discharge is not necessary to this, though it may play some part in contributing to bring it about.

Dr Brown, in reporting his procedure in an earlier paper, has told us how, although he attached importance to 'abreaction,' he energetically strove to secure relief of dissociation by insisting, while the patient was being roused from hypnosis, upon his continuing to remember in the waking state the scenes which he had re-lived and described in the hypnotic state. In this procedure he seems to have recognised practically that the emotional excitement was not in itself the curative process, but that at the most it was contributory only to the essential step in the process of cure, namely the relief of amnesia or dissociation.

That the discharge of emotional excitement plays no essential curative rôle is indicated by those cases in which relief of dissociation and consequent general improvement are effected without any appreciable display of such excitement.

That the emotion accompanying the recollection of the disturbing experience may contribute to the relief of dissociation there is every reason to believe, for it must aid in securing the complete recollection of the experience in all its details; and this in two ways, directly and indirectly. Directly by giving force and vivacity to the whole train of recollection; indirectly by aiding to overcome any repressive tendencies which contribute to maintain the dissociation.

I submit, then, that the observable facts justify us in assigning only

a subordinate rôle to the emotional excitement, a rôle which consists merely in *contributing* to the relief of dissociation, which is the essential therapeutic step achieved in the alleged 'abreaction' process. And I submit further that the principle of 'abreaction' is founded upon a misleading way of describing the facts of our emotional life, namely that which I have characterised above as the conception of packets of emotional energy, capable of becoming attached to, and detached from, ideas, shifted hither and thither according to the will and skill of the psycho-analyst, and repressed or 'abreacted.'

The alternative view, which seems to me perfectly consistent with the facts, is that an emotion of a particular quality, say fear, is always the expression of the operation of a particular disposition, which is an enduring self-identical feature of the structure of the mind (in neural terms—an emotional centre located in the base of the brain). That such an emotional disposition is one of an array of such, each of which may be regarded, according to our taste in such matters, either materialistically as a chemical power station in which nervous energy may be generated or liberated in great volume; or vitalistically, as a channel which, in the course of biological evolution, has become specialized for the direction towards some one great biological end (such as self-preservation or reproduction) of the common life-energy which animates the organism.

According to this view, such a centre or disposition cannot be in itself dissociated; nor can its energies be repressed and rendered latent, or detached and transferred in packets and attached to various ideas. Rather, dissociation, we must believe, though it may occur at various levels of the nervous system, as Dr Brown suggests, never involves an emotional centre or affective disposition as such. It affects rather the various channels through which our intellectual or cognitive processes play upon one another and upon the affective dispositions. In the adult each such affective centre can be reached or brought into action through a multitude of such channels; and, when the memory of an emotionally disturbing incident has become dissociated, this amnesia implies, not that the idea of the incident together with an attached charge or packet of emotional energy has been isolated and detached from the rest of the nervous system, but that the nervous elements concerned in the recollection of this incident are relatively isolated or dissociated from other parts of the cognitive apparatus, from other cortical elements, while retaining their connexion with the affective centre. The dissociated group of cortical elements then forms with the affective centre a relatively isolated couple, or system, within which a circular or reciprocal activity

goes on. The affective centre, far from being thrown out of action, tends rather to be unduly active in virtue of this uncontrolled vicious circle; and, being open to excitement through many other channels, any such excitement of it tends to revive and intensify the activity of this complex. Hence we see, in the soldier who suffers from amnesia for some terrible incident of the battle-field, no incapacity for fear, but rather an undue liability to fear from a great variety of occasions; and a very slight occasion of fear, such as a sudden noise, may start up the vicious circle and so throw the patient into a fit, fugue, somnambulism or dream, in which this vicious circle dominates the organism. In these conditions the patient simply lives through the experience again; and, just because its cognitive content is dissociated, he lives it as in the present, rather than as a memory of the past, or rather without any of that complex higher-level activity involved in the awareness of the time-relations of any experience. But, as soon as the dissociation is overcome, though the same train of recollection may recur, its power to produce emotional distress is greatly weakened by the patient's accompanying awareness of his present surroundings and his knowledge that the experience belongs to the past. The process of readjustment of his emotional attitude can then begin, or, in other words, he makes progress in 'autognosis.'

I believe that dissociation may be produced suddenly by emotional shock, or gradually by a more or less long-continued process of repression, which may be more or less conscious or unconscious. And I believe that, in either case, the dissociation may be actively maintained by repressing forces. But the recognition of this does not, I think, require any modification of what I have said of the part played by the emotional factor in neurosis and of the criticism I have offered of the notion of 'abreaction.'

I will add in conclusion that I see no reason to distinguish in principle such symptoms as *amnesia* for a more or less extensive tract of experience, from simple functional paralyses of limbs, of the voice, or of purely sensory functions. They may all be usefully and legitimately regarded as *amnesias* depending upon functional nervous dissociation, at various levels of the nervous system, whether induced by shock or by repression. The one important difference between the extensive high-level amnesias and those of low level, the simple paralyses and anaesthesias, seems to be that, in the former class of cases, the dissociated dispositions retain their connexions with the emotional centres; while in the latter class, the simple paralyses, the dissociation occurs at so low a level in the ner-

vous system that the dissociated elements are no longer able to reach or to affect the emotional centres. If this be true, then the emotional calm of the soldier suffering from a well-marked functional paralysis is due not merely, as we might be inclined to suppose, to his consciousness of possessing a disability which secures him from a return to the battlefield, but also is due to his freedom from that circular reciprocal self-maintaining activity between the dissociated disposition and the emotional centre, which is the ground of most of the symptoms of those patients who suffer from dissociations of a higher level.

Since these brief notes were written, Dr Brown has been so kind as to send me a copy of an article in the *British Medical Journal* of Jan. 31st, 1920. In this article he reports a case which he describes as "a crucial case of the value of abreaction, or the working off of emotion under hypnosis." It is the case of a gunner who, for a period of two years ensuing upon 'shell-shock' in the field, had suffered from 'tremor of the right hand.' Under hypnosis he vividly and emotionally recalled the incidents preceding and leading up to the critical moment, when his gun exploded. During the recital of these incidents the tremor of his right hand increased and spread throughout his body and limbs, and then suddenly ceased and did not recur. On being roused from hypnosis his memory of the incidents was clear.

Dr Brown argues that the relief of the tremor cannot have been due to suggestion. There I agree. But when he goes on to say—since the relief was not due to suggestion, it must have been due to 'abreaction,' to the working off of a pent-up charge of emotion—I beg leave to differ. Is there no third possibility? Dr Brown himself in the earlier part of the article referred to, and elsewhere, has emphasized the importance of the relief of dissociation. I suggest that, in this crucial case, the essential step in bringing about relief was neither suggestion nor 'abreaction,' but just the abolition of the dissociation.

Let us note that there is evidence that the emotion was not pent up. The continued tremor of the hand shows rather that the emotion was continually discharging itself through this channel. Why exactly this discharge took this direction it is not possible to say; but a more minute study of the circumstances might show that, at the moment of emotional shock, the right hand was making some violent spasmodic effort<sup>1</sup>.

The condition was then, I suggest, as follows: the memory of the shock and of the preceding incidents was dissociated, *i.e.* the corresponding cortical dispositions were disconnected from all others of the

Dr Brown informs me that this was actually the case.



higher or cortical levels; but they retained their connexion with the fear centre in the basal ganglia; and, through this, also with the motor centres of the right arm. The cortical disposition with the emotion centre formed a couple of circular self-sustaining activity, the excitement of which found an outlet more or less continuously through the nerves of the right arm, whose motor centres are also in partial dissociation and form part of the dissociated system. I suggest that the moment at which the tremor ceased was the moment at which the dissociation was overcome. The emotional energy of the system, instead of remaining confined to the one narrow system, was then able to take a more normal course, spreading over to many cortical dispositions; the mental accompaniment being the realisation of the terrifying incident in its past setting and in its true relations to present circumstances. Hence the return of power of voluntary control, *i.e.* the control of the whole psychophysical system over the dissociated part.

So long as the dissociated couple remains dissociated, there is no possibility of breaking the vicious circle. But the overcoming of the dissociation at synaptic junctions is *ipso facto* the breaking of the circle by the discharge of energy from the system in directions previously barred<sup>1</sup>.

I would add that the constant discharge of emotional excitement by way of some such symptom as tremor of a limb, as in Dr Brown's case, is presumably one of the factors that maintain the condition of general *asthenia* which is the rule in such cases. For it involves a perpetual wasteful expenditure of the vital energy.

<sup>1</sup> The system then becomes subject to inhibition according to the principle of 'drainage.'

## THE REVIVAL OF EMOTIONAL MEMORIES AND ITS THERAPEUTIC VALUE. (IV)<sup>1</sup>

REPLY BY WILLIAM BROWN.

BEFORE I attempt to reply in detail to the criticisms of Dr Myers and Dr McDougall, I would remind my readers that the factor of *re-association*, upon which they both lay stress, was not only recognised by me in my paper but was explicitly used to give a psycho-physiological explanation of the beneficial effect of abreaction or psychocatharsis, in close parallel to the theory which Dr McDougall himself now propounds. In advocating the revival of emotional memories, I am *eo ipso* advocating the redintegration of the patient's mind. But my difficulties begin rather than end here. On the intellectual side, I find psycho-synthesis far transcending the crude associationism of physiology, and I therefore use the special term *autognosis* to emphasise a new factor of self-objectification and self-scrutiny in this process. On the affective side, I find abreaction or psychocatharsis as a further possible factor of therapy.

Dr Myers distinguishes *affect* from *emotion*, and submits that "the cause of functional amnesias is not repression of the emotional, but repression of the affective component." In my view this distinction is an artificial one. Emotions may be pleasant or unpleasant, either essentially or according to their mental context, and this pleasantness or unpleasantness may serve as an index of mental harmony or disharmony. But the 'kinetic drive' of an idea or system of ideas is its accompanying emotion, not mere pleasure or displeasure, and it is therefore emotion which is the real objective of repression. On the other hand I entirely agree with Dr Myers when he says: "I do not think that in cases of shell-shock conflict and attempted repression *necessarily* precede dissociation," having myself written the following in my paper on "War Neurosis," *Proc. Roy. Soc. Med.* 1919, vol. xii.: "I feel inclined to suggest another hypothesis for many of the cases—viz., that the reinstatement of intense emotion acted physically in overcoming synaptic resistances in specific parts of the nervous system, and so put the nervous system into normal working order again. The effect is more potent than that

<sup>1</sup> A contribution to a discussion at a meeting of the Medical Section of the British Psychological Society on February 18, 1920.

of, for example, an electric current would be, since it is selective and occurs only in just those parts of the system concerned with the production of the symptoms. The theory of abreaction would still apply to the cases where mental conflict and repression of emotional tendencies had taken place at the time of the shock or injury. But in many cases the conditions of the injury appear to have excluded this mechanism." I also agree with him that repression may occur *after* the removal of the shock-amnesia. Indeed, the individual case is always of more or less complexity, with repressions of various kinds and of various dates with which the physician has to deal, and always needing an application of the method of autognosis, over and above that of psychocatharsis, to give him true insight into his condition and so to prevent relapse. Dr Myers is mistaken in believing that I maintain that the value of autognosis consists "in securing emotional revival." For me it is *always* much more than this, and in the treatment of anxiety states it is a long and complicated process, involving the closest possible scrutiny of motives and memories, and a thorough inquiry into the patient's present relation to his duties and his aspirations, to his hopes and his fears. There are many factors at work in psychotherapy—re-association or psychosynthesis, abreaction or psychocatharsis, autognosis or self-knowledge, and, finally, suggestion which, whether in the form of Freudian 'transference' or in more explicit guise, is never absent in any method of treatment. The object of my paper was to direct attention especially to one of these factors, viz. to psychocatharsis, and I singled out early cases of shell-shock for mention, because their treatment seemed to illustrate the working of this factor in its purest form, although doubtless never in complete isolation from other factors. I myself consider that autognosis is the most suitable word by which to describe the general method of psychotherapy, because it can be taken in a wide sense which includes all the factors above-mentioned, and reminds us of the inadequacy of individual factors taken alone. Even when symptoms do clear up by other means, such as psychocatharsis or suggestion, the treatment should be supplemented by the more thorough-going autognostic process, to ensure against relapse.

There were great difficulties in the way of carrying out in France a comparative inquiry into the efficacy of the two methods of treatment—Dr Myers's and my own—as he more than once suggested. In the early cases which I saw, I found it impossible to prevent some recall of emotion when I was removing the amnesias, and in my own cases I must say that the results were more satisfactory the more

complete the emotional revival. This may have been due to the faith which I had in psychocatharsis, although even on the principle of crude re-association the restoration of the emotion would seem required to make the restoration of the memory complete. I readily admit that, although in isolated cases one may succeed in reducing the *rôle* of suggestion to a minimum and thus make other factors of treatment stand out with some prominence, yet in long series of cases, such as we saw in France, the implicit beliefs of the doctor, if he be enthusiastic, must have a strong suggestive effect upon his patients. I certainly would not claim better success than that achieved by Dr Myers. He had been working for two years in France before I got over there. I therefore had the great advantage of learning much from his experience and from his important published work. It was to his influence that I owed my appointment as neurologist to the Fourth Army, where I could see war neurosis cases in their earliest stages, and in this and other ways my work has been closely linked up with his, and I owe him a debt of gratitude that I can hardly hope to be able to repay adequately. I like to think that our views are not quite so different from one another as these papers may seem to show. I have learnt much from him in the past, and I am anxious to allow full weight to his conclusions now.

With the greater part of Dr McDougall's paper I find myself in close agreement,—much closer than he may realise. He writes: "Dissociation... never involves an emotional centre or affective disposition as such. It affects rather the various channels through which our intellectual or cognitive processes play upon one another and upon the affective dispositions." And on this basis he proceeds to sketch out a physiological theory of dissociation and re-association in close agreement with my own. In his reference to my case of the gunner with the tremulous hand, he claims that "the essential step in bringing about relief was neither suggestion nor 'abreaction' but just the abolition of the dissociation." But in proceeding to explain this further he has to assume the process of abreaction as a *vera causa* in "the overcoming of the dissociation at synaptic junctions," *i.e.* as a more ultimate cause, as I explained it in my "War Neurosis" article (see quotation above). He certainly explains it more clearly than I did.

But physiological theories are always very schematic and incomplete, and in this case I cannot help feeling that the psychological problem is only partly solved and much of it still hangs in the air. In particular I cannot agree with Dr McDougall's remark in a footnote that the

question of emotional memory is an unreal one. Freud<sup>1</sup> finds great difficulty in coming to a conclusion on the nature of 'unconscious affects' as contrasted with 'unconscious ideas,' and recognises that the problem of the former is different from that of the latter<sup>2</sup>. I, too, find this problem a difficult one and anything but unreal, and I had hoped that it might have attracted discussion, especially in relation to Bergson's theory of memory and to the interactionist theory of the relation of mind to brain (which I accept). But space does not permit me to develop this discussion further here, and I must postpone it for a more convenient occasion.

<sup>1</sup> *Sammlung kleiner Schriften zur Neurosenlehre*, Vierte Folge, 1918, Ss. 307-310, esp. S. 309. "Der ganze Unterschied rührt daher, dass Vorstellungen Besetzungen—im Grunde von Erinnerungsspuren—sind, während die Affekte und Gefühle Abfuhrvorgängen entsprechen, deren letzte Äusserungen als Empfindungen wahrgenommen werden."

<sup>2</sup> See also Ribot, *Problèmes de Psychologie Affective*, Paris, 1910. Claparède, "La Question de la 'Mémoire' Affective," *Archives de Psychologie*, x. 1911 (criticism of Ribot).



## PSYCHOLOGICAL ADAPTATION.

BY CONSTANCE LONG<sup>1</sup>.

IN the Swiss school of analysis we interpret the dream both objectively and subjectively. When the dream symbols represent real objects of love or hate or interest in the outer world and are so understood, and so referred to in the associations of the dreamer, we call the interpretation objective (akin to the "material category" of Silberer<sup>2</sup>). This kind of analysis dissects the dream into its memory elements, and relates them to matters of fact. This is causal interpretation.

Subjective interpretation relates the dream elements to the feelings of the dreamer. In this all the rôles played by the people or things in the dream are regarded as expressions of tendencies or attitudes or views of the dreamer. This approximates to Silberer's 'functional symbolism.' Subjective interpretation is extremely important from the teleological standpoint, for it points to the solution of the individual problem, since the dream as a rule constellates round the most difficult and painful problem of the moment. Both kinds of interpretation are valid. The one is analytic and leads down into the depths of the impulsive life. The other is synthetic, and brings back from the depths the raw material for the purposes of constructive life.

This twofold interpretation fits into the general scheme of life because adaptation is itself twofold, viz. to the inner subjective world of psychic reality, and to the outer objective world of material reality. A certain amount of adaptation to both sides has to be made by every man, and the counter-claims of the two sides are present in all. Inasmuch as the conflict entailed is conscious, society and the individual advance by means of it. Inasmuch as the counter-claims are adjusted by repression, the conflict is thrown into the unconscious, where it is carried on in a manner that robs us of our energy, and withholds from us the possibility of attaining the fruits of our strivings.

Even the most normal person has a good deal of unconscious conflict but he does not break down under it. Perhaps the abnormal physical

<sup>1</sup> Read before the Medical Section of the British Psychological Society, April 28, 1920.

<sup>2</sup> Silberer, *Problems of Mysticism and its Symbolism*.

factor is lacking, such, for instance, as a brain defect, an organ inferiority, some deficiency or maladjustment of internal secretions, or a pathological blood state. Hyper-sensitive individuals, however, break down under the conflict and develop a neurosis; while still less stable persons may be overwhelmed by the unconscious, and losing their orientation become mentally deranged. There is no conspicuous line of demarcation between these states. They pass insensibly from normal to abnormal, the result differing in degree more than in kind. Questions of physical and psychical inheritance, and questions of social environment all play their part in making up the human being. Whatever factors among the foregoing contribute to the breakdown there will inevitably be found in every neurotic individual a basis of unconscious mental conflict, with a resulting failure in adaptation. All the insoluble problems arise round the unconscious conflict and neurosis is unmistakable evidence of its presence.

The whole object of treatment by psychological analysis is to open up the unconscious mind to the sufferer in such a way that he is enabled to change his relation to it. In addition to the unconscious conflict every case of neurosis also presupposes an introversion of libido, *i.e.* a turning in of the energizing life current which first over-stimulates the ego feelings, and then regressively animates the phantastic images of the unconscious, giving them a fictitious and even mythical importance.

The analytic treatment does not really consist in getting at a psychical foreign body and letting out psychic pus! There are no foreign bodies in the mind. Everything that is there should be there. It is more a question of bodies in a wrong relation. There are bodies that have been converted into bogies by a process of myth making. There are complexes formed above or below the threshold of consciousness which through dissociation act autonomously. "The past follows us at every instant," says Bergson, "all that we have felt, thought, or willed from our earliest infancy, is there, leaning over the present which is about to join it, pressing against the portals of consciousness that would fain leave it outside." It is the dissociation of the complex that gives it the semblance of a foreign body. It is the unconscious character of the emotion attached to it that gives it its peculiar feeling-tone. The feeling-tone belongs to the phantasies which are associated with the complex. In making these phantasies conscious the way is opened to a new adjustment with reality. It is really rather strange to hear psychotherapists still held by the attractive theory of abreaction which Freud was the first to discard as being far from the root cause of the illness.

Abreaction opens as it were the first portal of the unconscious. It acts effectively up to a point. Certain resistances are broken down, there is a relief of tension as the emotion is gradually transferred from the unconscious of the patient to the physician. There is a sort of 'absolution' involved, a feeling of having submitted to the collective judgment in the person of the physician, who in the capacity of judge and saviour becomes the helper and redeemer of the new life of effort at whose instigation a fresh adaptation is undertaken. Abreaction works in a crisis. It often allows some of the hidden values of the sufferer to come to realisation so that he can once more get on with life. In so far as it succeeds it does so on account of a leading out into the consciousness the sum of energy—libido—formerly occupied with the complex and by restoring the complex itself to conscious control. This in many cases is all that we as physicians are permitted to do, and also in many cases this is all that we need to do. But do not let us be deceived. Abreaction introduces us merely to the ante-room of the unconscious. We have not touched the root causes of the dissociation. The general system of phantasies remains unattacked, and indeed it is through the transference of the father or mother image to the physician that the dynamic force for the alleviation is provided. In this connexion I cannot forbear quoting from the Persian of Jámí, since it shows that the value of abreaction was well understood by the Easterns in the fifteenth century. It is called "The Afflicted Poet."

"A poet paid a visit to a doctor and said: 'Something has become knotted in my heart which makes me uncomfortable; it makes also my limbs wither, and causes the hairs on my body to stand on end.'

"The physician, who was a shrewd man, asked: 'Very likely thou hast not yet recited to any one thy latest verses.' The poet replied: 'Just so.' The doctor continued: 'Then recite them.' He complied, was requested to repeat them, and again to rehearse them for a third time.

"After he had done so, the doctor said: 'Now arise, for thou art saved. This poetry had become knotted in thy heart, and the dryness of it took effect upon the outside; but as thou hast relieved thy heart, thou art cured.'"

The recognition that adaptation to the inner reality is as important in human life as adaptation to the outer reality necessarily has very far-reaching results on our methods of analysis. The well-being of the individual lies in the adjustment between two sets of equally valid claims. The antagonism between the conscious and unconscious now has the appearance of being a claim for better understanding between the ob-



jective necessity and the subjective necessity. It is the injustice done to the one or the other that produces a loss of balance and disharmony in the individual. Dreams and phantasies in their subjective significance are not to be regarded solely as the result of repression but also as 'schemes or plans' which have a meaning for the solution of the problems of the moment. They are corrective and compensatory to the merely external view. Thus regarded, the analogical character of the dream is estimated and the manifest content is credited with an important meaning. The teleological purpose of the dream gives it a moral value, for it has to do not only with our origins but also with our destiny. It is really easy to understand why the Viennese school repudiates analysis that on one side is based on the teleological value of the phantasies. If the unconscious is regarded as the all-round inferior mind, then every demand it makes will be resisted as an intrusion, producing hostile feelings analogous to those innate prejudices seen in class warfare. If, on the other hand, the unconscious is regarded also as the creative mind then we shall allow that it has claims upon our attention, at least as great as those that belong to the world of created things—and that it works constantly for our good as well as for our undoing.

I propose to approach the question of adaptation from the point of view of the psychological types into which men are grouped collectively. That is to say, men are born into a type just as they are born into a family. Latterly in the psychological analysis of my patients I have mentally divided them into two main classes—viz. those who are orientated to the unconscious, and those who are orientated to the conscious. This is actually a different division from the types of introversion and extraversion already described to us by Dr Jung, although it arises out of it. In his further work on types Dr Jung has discriminated four types, dividing them into groups under the four psychological functions of thinking, feeling, intuition, and sensation. Two of these types adapt themselves to life by processes we call rational, viz. the introverted type by thinking, and the extraverted type by feeling. The other two adapt themselves by instinctive and unconscious processes, viz. by intuition and sensation, that is to say by non-rational processes. Dr Jung has been working on the types for several years. He was early aware that the two types he first described included others, and he is about to publish a book dealing with this subject. I have often talked with him on this matter, and also with other analysts, notably Miss Maria Moltzer of Zürich, and Dr Beatrice Hinkle of New York.

What follows, however, belongs to my personal understanding of the

types, and is verified in my personal experience with my patients, and must not be taken definitely as Dr Jung's views. It has become habitual for me to work with the types in the back of my mind, and I have found it so illuminating that I cannot forbear to introduce the subject.

The above names of types are abstract definitions, which are too abstract for reality. The ideal type only exists in pathological states, since an over-accentuated type-development involves such severe repressions as can only occur in neurotic or psychotic forms. Most people have mixed qualities; their main tendency, and their most highly adapted function is indicated in their type-name.

In the introverted or thinking type the preservation of the ego is all important. The ego is the object of the libido; it is the *real* value, and the flow of libido is centripetal. This type turns naturally to philosophical thinking, and by abstracting the idea from the object gives the chief place to the concept. It appreciates the external object in retiring from it and thinking about it. The thinking is well adapted but the feelings are introverted and repressed and relatively inaccessible. The claims of the object are discounted because they threaten the integrity of the ego. The repressed and unconscious feelings tend to be projected and have a personal character. This type is embarrassed when it is suddenly confronted with a situation wherein thought offers no solution. Examples of statesmen of this type are President Wilson and Mr Asquith. 'Wait and see' is really typical of the introvert's method. It means, wait till I have been able to detach myself from this concrete situation, wait till I have been able to think it out. Sight, for this type, means arriving at the abstract idea—not infrequently too late for use. It gives an appearance of stubbornness to the psychology. The feelings are really too 'tender' (to use Prof. James' word) to bear the strain of close contact with the external object, and are kept out of the business.

In the extraverted type the external world is the object of the libido, the current of interest being centrifugal. They love the world and the people and things that are in the world, from which feelings the ego gains enhancement. This type understands the object by a feeling relation with it. The aim is love rather than power, or the attainment of power through the preservation of the object. The thought function in this type is relatively unconscious, hence the thoughts tend to be projected on to the object. When the thought function is trained it turns naturally to science. This type is embarrassed when it is suddenly confronted with a situation which feeling cannot solve. The late President Roosevelt is an example of this type, also Mr Lloyd George, although the

latter inclines to the intuitive type to be described later. Lloyd George is in a sense very accessible because he goes close up to persons and to the situation in order to feel himself into it. At the same time he lacks the quality of abstract thinking; acting first somewhat impulsively and thinking later, he produces the effect of changeability.

It is interesting to note that the late Furneaux Jordan, F.R.C.S., in a book published in 1886 called *Anatomy and Physiology in Character*, described two types under the rather unfortunate names of Shrewish and Non-shrewish, names which applied equally to both sexes. It is not difficult to see that they approximate to the extraverted and introverted types respectively, although without any consideration of the compensatory co-function.

In the subconscious types, viz. the intuitive and sensational, the unconscious is the object of the libido. The psychology here is subjective and like the primitive's. The mode of adaptation natural to these types has been rendered of secondary importance in the process of evolution, by the development of rational thought. We give too little credit to-day to intuition for the excellent reason that it has often led us astray. It perceives but does not judge. It is not sense perception which leads to consciousness but intuitive perception which leads to the unconscious. We need a new approach to it through a better understanding, for as Bergson reminds us "although intuition transcends intellect, it is by means of intellect that it has grown beyond the limitations of mere instinct<sup>1</sup>." The subconscious types react less to the external world than to a subjective image of that world. In these types intuition and sensation bear the same relation to each other that thinking and feeling occupy in the rational types. The strictly intuitive person represses sensation, and the extreme sensationalist intuition; they are co-functions mutually corrective and compensatory.

Artists naturally belong to these types, although not exclusively so. The artist is essentially a medium of the unconscious. His works do not come out of nothing. Where he is not otherwise inhibited he projects his unconscious into creative forms by the use of his symbolic function. In this way we get work of the greatest universal value on the one hand, and on the other of the very smallest merit, and of a very 'personal' kind. In the absence of an expression which can work itself out in art, or some other form, for such persons the unconscious is apt to create compulsions.

Walt Whitman is a pertinent example of a subconscious type at its

<sup>1</sup> Ruhe and Paul, *Henri Bergson*, p. 225.

apogee of self-consciousness. He begins a poem called *Walt Whitman* in this way:

"I celebrate myself;  
And what I assume you shall assume;  
For every atom belonging to me, as good belongs to you.

Stop this day and night with me, and you shall possess the origin of all poems;  
You shall possess the good of the earth and sun (there are millions of suns left);  
You shall no longer take things at second or third hand, nor look through the  
eyes of the dead, nor feed on spectres in books;  
You shall not look through my eyes either, nor take things from me:  
You shall listen to all sides, *and filter them from yourself.*"

It is characteristic of the subconscious types that they find great difficulty in adapting themselves to the demands of society. They are impatient of responsibility, and perpetually come to grief over such matters as money and marriage. They find fetters where other men find incentives. This perhaps accounts for the necessity such a poet-philosopher as Walt Whitman feels to stress the object; he says:

"I will go to the bank by the wood, and become undisguised and naked;  
I am mad for it to be in contact with me."

As if his intuition needs that contact with passion to attain a sense of reality. Again he says:

"Welcome is every organ and attribute of me, and of any man hearty and clean;  
Not an inch, nor a particle of an inch, is vile, and none shall be less familiar than  
the rest."

Unredeemed, these types are unstable in their human relations, because in so far as they are orientated to the unconscious, they are cut off from being understood or from understanding the rational types. The primordial images and instincts comprised in the collective unconscious are more valid for them than the external world, and form the scarcely corrected basis of their impulsive ideas and actions.

For the sensational type the instinct side of the unconscious forms the object. Unless they are under the sway of some passionate emotion they hardly feel themselves to be alive. Unless their contact with others is productive of sensational effect they hardly realise the fact of the other's existence. Perhaps these people express themselves most happily in the histrionic arts and dancing. Under this denomination cases of extreme sadism and masochism belong, and here also we may expect to find those patients whose physical sensations play the chief rôle—such, for instance, as a hypochondriac whose life is dominated by a disgusting taste in the mouth, or a subjective odour. A psychotic patient of mine



recently refused to take food because directly she swallowed it she felt it creeping about under her skin, and passing down her arms and legs. In this class the mental conflict is expressed in bodily sensations.

Imperative and impulsive thoughts belong more especially to the intuitional type, because they are influenced by the primordial images which, if uncorrected by reality, produce obsessions of the mind. These instinct-forms of thought enter the mind with terrible power, and are accepted without judgment or evaluation. A certain patient has a phobia of murder germs. She claims to have been infected by buying clothing from a shop where a murder was committed. She has burnt hundreds of pounds' worth of clothes because they came from this place, or have been touched by infected things. The mere utterance of the word 'murder' infects the environment. Anything that touches a newspaper is contaminated if the word is there. She counteracts the effect of the murder germs by countless rituals, and is actuated by the principles of totem and taboo.

Short of a compulsion neurosis, which is the typical neurosis for this type, there is a great tendency to form identification. Adaptation to the external world by means of identification with a parent or a friend, or a teacher, is fairly common. Such persons are driven to express their emotions in others and in the collective because they have found no channel of individual expression in the objective world. They act as the parent acts, feel as the friend or husband feels, and get on pretty well till something disturbs the adaptation. By an unconscious pose the reactions of another personality may be successfully followed. The subjective types appear to be exquisitely sympathetic owing to their ability to project or introject. This is productive of perfect harmony so long as the relation lasts. But when separation befalls through the occurrence of conflicting interests or unforeseen circumstances, the pulling apart is a painful affair. The one being orientated to the conscious, the other to the unconscious, or both being related to different aspects of the unconscious, reconciliation becomes very difficult because they are always talking about the same thing from a different angle. The separation is as complete as the former identification was complete.

We get a picture of an individual of the intuitive type from the able pen of Mr Clutton Brock in his book *Shelley the Man and the Poet*. He writes as follows: "Shelley was scarcely aware of imperfection in himself; and when he found it in others and in external circumstances it seemed to him to be inexplicable evil, which ought to be, not improved, but abolished. Thus there is some excuse for those admirers who think



him perfect, and some for those of his contemporaries who thought him a fiend incarnate. There was, or appeared to be, no conflict between different parts of his nature, *but only a conflict between his nature and the world outside him*<sup>1</sup>. He saw that such a conflict existed, but thought it was produced altogether by some external tyranny, or some inexplicable perversity in man. There seemed to be a perfect harmony in himself, so he thought perfect harmony was possible in the world if it would only get rid of those inhibitions which express men's consciousness of an existing discord....He never in the course of his short life attained to a full consciousness of himself....He loved people, not for themselves, but for what he thought of them. He was like those artists who paint the ideal of their own imaginations, not the excellence and promise of the real things."

Difficulties for this type arise in another way also, viz. from the animation of the pairs of opposites. As an example: an artist friend of mine had a good deal of success as an academic painter. This success made him feel cheap. He thought himself not to be following his highest feeling for art, whereupon he relinquished the academic style for a less popular one. He was soon reduced to poverty. Now the value of money naturally assumed great importance because it was, in a manner of speaking, in the unconscious, whereupon he indicts society which ought to endow him and allow him a few hundreds a year, in order that he might repay it with works of art. Lo and behold, a modicum of success came to him! Whereupon he declared himself hampered by it. He needs must once more burn his boats and go to a new country where he had to begin all over again. To the onlooker this conduct is completely irrational, but with this type the accent of value always moves to the pole which is in the unconscious. They are animated by the pairs of opposites, but without the morbid effects that one sees in the neurotic, in whom the pairs of opposites are more or less violently torn asunder, and in whom regression of the libido to the unconscious is a pathological condition. Incidentally we owe things of great value to this type. They are of more value to us than they are to themselves. They interpret our hidden selves to us, and enlarge our perceptions. They have the run of the unconscious, but as a gift, and not by personal differentiation. One has only to instance Shelley's work to recognise that on the creative side the type needs no apologist. It is perhaps what might be called a feminine type, not that it really belongs more to woman than man, but it contains tendencies that are somewhat arbitrarily called feminine.

<sup>1</sup> The italics are mine.



Some of us who study the types<sup>1</sup> come to the conclusion that people are even more unlike in their mental or emotional reactions on account of type than on account of sex. Speaking from the standpoint of an analyst one can reckon more certainly on the way a person of marked type will behave than on the way he will behave because he is a man. There are necessarily certain conventional reactions he adopts on account of sex which do not really belong to his individual character at all.

Philosophers like Bergson and Kidd lay enormous stress upon intuition. Indeed intuition often finds a way where every other psychological function fails to find one, the reason being that there are times when a completely new adaptation is needed, when the primordial images mixed into the other functions give a value to the idea which fits the unique occasion. Kidd says in his *Science of Power*, "It is the mind of woman that is destined to take the lead in the future of civilization as the principal instrument of Power." Personally I think he is mistaken in thinking that the future redemption of the world is with woman *quâ woman*. It is rather with the feminine principle, the fructifying power of those who will nourish the seed of the future in patience, who will submit to the burdens of to-day in order that the new era shall arise. Schopenhauer's indictment of woman that "The race is always more to her than the individual," shows the hostility of the rational intellectual thinker against the super-validity, on many occasions, of the intuitive perceptions which reach beyond the present. The psychological bisexuality of the human being permits each person to carry within himself a male and female partner, an intellectual *v.* an intuitive function, a conscious rational *v.* an unconscious non-rational judgment. There is a radical hostility between the two, they are pairs of opposites. The hostility is constantly projected into consciousness, as in Schopenhauer's case. He makes an image of woman—which has many of the characteristics of the Terrible Mother of mythology. The same is true of Otto Weininger. Just as this conflict between the sexes has to be resolved in the process of individuation, so the opposing psychological functions have to be united in a new harmony. Our present-day civilization is tormented with problems for which there appears to be no rational solution. Perhaps it is to the more primitive function of

<sup>1</sup> Following in a discussion with G. Stanley Hall, Ph.D. on "Points of difference between Men and Women." Dr Beatrice Hinkle said: "It is a very large and intimate analytical experience of the lives of men and women that has forced me away from thinking of people according to sex, and led me to the substitution of types instead. When an individual consults me my collective classification is not sexual, but is determined by the answer to my mental question, 'To what type does he or she belong?'"

intuition that we must return, with the added wisdom that centuries of scientific thinking have given us.

The study of the Primitive has become of immense importance to us, perhaps because we dimly feel we have lost as well as gained something in the process of evolution and we half realise in him the prototype of our own subconscious man, a being for whom the unknown is full of magic, who can be withered by the evil eye, or stricken dead by fear. Dr Rivers<sup>1</sup> said in the inaugural address of this Section: "There is a general agreement that in neurosis and psychosis there is in action a process of regression to primitive and infantile states....In so far as the thought and behaviour of savage man are primitive, they furnish material which helps us to understand and to deal with regressive states exhibited by sufferers from disorder of mental functions." He went on to say that medicine standing alone and ethnology standing alone are helpless, but bases wide hopes upon the union of these lines of research. It seems to me that the union will be found in a closer and deeper study applied to the unconscious mind itself through personal experience of it, but only when we can detach ourselves from the idea that we have yet learnt all its laws, or even that we have followed to their conclusion those we begin to understand. We certainly need a wider conception of the unconscious than that which believes it to be only the result of repression. In the view of the unconscious that I follow it would be impossible to acquiesce in Dr Jones's statement that "only what is repressed is symbolised; only what is repressed needs to be symbolised<sup>2</sup>." This is a necessary correlate of the Freudian view of the unconscious. Jung's view of the unconscious is different.

Dr Jung dealt at some length with his formulation of the Collective and Personal Unconscious at the Symposium on "Instinct and the Unconscious" held in London last Summer (1919). As the foregoing ideas about the necessity of adaptation to the inner as well as the outer are related to this conception of the unconscious you will perhaps forgive me if I remind you of his views<sup>3</sup>. Jung's formulation is a conception of the collective psyche as that which embraces collective thought or collective mind, and collective feeling or herd soul. All these contents are universal and impersonal, they are inherited and potentially present in everyone. It is the unconditioned, undifferentiated basis of all, the "mother foundation" which is constantly represented symbolically in myth and dream as the Great Mother with her double aspect as Destroyer

<sup>1</sup> *British Journal of Psychology*, March, 1920.

<sup>2</sup> *Papers on Psycho-Analysis*, p. 158.

<sup>3</sup> *Analytical Psychology*, Ch. xv.; *British Journal of Psychology*, Nov. 1919.

and Preserver. The conscious and personal unconscious, on the other hand, contain certain contents of the collective psyche as personal differentiation, that is as personal acquisitions of the individual life as opposed to what is inherited.

In the personal unconscious all the lost memories are stored. New products arise from a new combination of unconscious contents, of which dreams are a common example. In addition to the lost memories and the new combinations, intentional repressions of painful and incompatible thoughts and feelings form an important part of the contents. It is here we find the infantile mind, whereas the primitive aspects belong to the impersonal unconscious.

As a correlate to this, and to distinguish the ego contents of the collective unconscious from the non-ego contents, the Persona is postulated as distinguished from the Individual. The persona is an "excerpt from the collective psyche".<sup>1</sup> The persona was the mask actors wore, through which they spoke. The mask constituted the appropriate appearance for the part played. The persona then is what a man appears to be both to himself and others. A man's type determines his persona to a great extent; he is as he is by nature. The individual, on the other hand, is what he becomes, and is the product of a life-enduring differentiation from what is general and collective and inherited. The persona and the individual are in a sense pairs of opposites. The idea of the persona and the individual comprises as great a difference as that of a person and a personage, save that a personage as often as not attains distinction by conforming to collective opinion and gaining collective approval; whereas the individuated person differentiates himself from what is customary and average, and is only approved when he has given an equivalent to Society in exchange for the exemptions, licenses, or heresies through which he has established his freedom. "The unconscious being collective psyche, is the psychological representation of Society"<sup>2</sup>; the persona has no relation to it, because being itself collective it is identical with collectivity. Thus the persona is both an excerpt and a component of the general collective psychological function. As it is obvious we have originally nothing but collective material at our disposal, what is individual lies in the uniqueness of the combination of the psychological elements. Individuation follows after the dissolution of the persona into the collective psyche, "whereupon a principle arises that selects and limits the contents that shall now be consciously chosen to be accepted

<sup>1</sup> *Analytical Psychology*, p. 456.

<sup>2</sup> Jung, *Individuation and Collectivity* (unpublished MS).



as individual<sup>1</sup>." Individuation demands the surpassing of the type, first by recognition of what is missing or unconscious in the functions, then by consciously endeavouring to develop what is lacking in order to become free from the childish personality.

In the course of analysis what is unconscious in the mind is gradually made conscious—one gets deeper into the collective psyche—and it becomes obvious that phantasies appear which have no connexion with the actual experiences of the person being analysed, but which are a universal possession dormant from immemorial ages. Thus an impersonal layer of the unconscious is demonstrated, which is also called the absolute. Here the primordial images are discovered; they are the inherited potentialities of human imagination. These form the themes of myths and legends all over the world. In the individual case it is not merely a reproduction of myths once heard, but a new creation of mythology.

Similar images are produced by the insane, and are found in the oldest of existing human records. "The primordial images represent the most ancient universal and deep thoughts of mankind. They are feeling just as much as thought, and might therefore be termed thought-feelings<sup>2</sup>" and expressed differently Jung says the collective unconscious is "the sum of the instincts and their correlates the archetypes of apprehension." He says: "Just as instinct is the intrusion of an unconsciously motivated impulse into conscious action, so intuition is the intrusion of the unconscious content of an 'image' into conscious apperception.... The mechanism of intuition is analogous to that of instinct, with this difference that whereas instinct means a teleological impulse towards a highly complicated action, intuition means an unconscious teleological apprehension of a highly complicated situation. In a way intuition is a counterpart of instinct, not more or less incomprehensible and astounding than instinct itself<sup>3</sup>."

The archetypes of apperception are regarded as "the *a priori* determining constituents of all experience. Just as instincts compel man to a conduct of life which is specifically human, so the archetypes....coerce intuition and apprehension to forms specifically human<sup>4</sup>."

"Just as the instincts are deeply covered over by processes of rationalization, so also are the archetypes of apprehension overlaid. But man's conception of the world is just as regular and uniform as his

<sup>1</sup> Jung, *Individuation and Collectivity* (unpublished MS).

<sup>2</sup> *Analytical Psychology*, p. 411.

<sup>3</sup> *British Journal of Psychology*, x, No. 1, p. 18.

<sup>4</sup> *Ibid.* p. 19.



instinctive actions. It is the determining factor of this latter uniformity which is conceived as the archetype, the primordial image."

"The image might be conceived as intuition of the instinct itself, analogous to the conception of consciousness as an internal image of our objective vital processes....Just as we believe instinct to be thoroughly adapted and sometimes incredibly clever, so we must assume that intuition to which instinct owes its existence, must be of extraordinary precision<sup>1</sup>."

The symptoms of neurosis, particularly of compulsion neurosis, and the symptoms of insanity, show atavistic tendencies, such for instance as interest in excreta, which are remnants of an adaptation which was entirely suitable at one stage of our animal or anthropoid existence.

In every psychotic state the unconscious gains a super-value owing to the regression of libido to the collective unconscious, which it re-animates, having first flooded the ego feelings and stimulated a painful self-consciousness, in which the pairs of opposites, megalomania and feelings of inferiority, alternate. When Nebuchadnezzar, identified with the images of the unconscious, dwelt among wild asses, and ate grass, he responded to the inner compulsion to live his unconscious. This case has many parallels in our asylums. I saw a woman recently tossing her head, champing the bit, and pawing the ground. She told me, "I am a horse." In Nebuchadnezzar's day no doubt she too would have been allowed to roam unclothed in the open, her "body wet with the dews of heaven."

Jung has pointed out that in the introversion psychosis of dementia praecox, the strange mythological phantasies indicate the replacement of a recent adaptation to reality by an archaic one. The libido of these patients is taken from the function of reality as a whole, not only from the sexual function, which is now replaced by an "intra-psychic equivalent<sup>2</sup>." What is peculiar to these patients is the "predominance of phantastic forms of thought" founded upon a pre-occupation of the libido which is normally applied to the ego with the archetypal forms of thought.

In hysterical introversion, on the other hand, the libido designed for the outer object, is introverted and turns to the re-animation of the instincts with the production of auto-erotism. In these pathological states it will easily be seen that the mechanisms approximate to those we have recognised as belonging collectively to the subconscious types, for the

<sup>1</sup> *British Journal of Psychology*, loc. cit. p. 22.

<sup>2</sup> *Psychology of the Unconscious*, pp. 152 and 462. See also *The Psychology of Dementia Praecox*.

reason that they are less rational and nearer their instincts. The adaptation that the objective world has demanded from us has necessarily contracted our horizon to the things which it pays us to attend to, but all the same we are aware that when we work in close harmony with our instincts we get the best results. Hence regression of the libido into the unconscious, which produces new phantasies or re-animates the old, is an attempt at self cure (as Freud says of neurosis). The complete cure as I have indicated earlier, lies in a better adaptation to the demands of both worlds of reality, which can only in the last resort be based on the ability to discriminate between the real facts and the unconscious facts.

## RECENT ADVANCES IN PSYCHO-ANALYSIS<sup>1</sup>.

By ERNEST JONES.

THE progress made in psycho-analytic knowledge during the past five or six years has been, in spite of the great external hindrances, very considerable, and in the attempt to present it one is met at the outset by two special difficulties. In the first place, the later researches have shown that most of the problems in question are a good deal more complex than was perhaps at first realised, though such researches have naturally had to be based on the earlier work; it is therefore impossible to expound them without presupposing a knowledge of this earlier work, and I trust that this unavoidable fact will be borne in mind by those who find some of what follows too abstruse or abstract. The second difficulty in exposition is a more technical one, and is due to the multiplicity and variety of the contributions made during the past few years, which makes it hard to group or arrange them in any clear way. This difficulty I have dealt with mainly by the simple procedures of omission and selection. I shall not, for instance, touch on any branch of applied psycho-analysis except in the purely clinical field, and even here there are many interesting contributions with which I shall not be able to deal, among them being, to my regret, the valuable series of Pierce Clark's on the subject of epilepsy(1). In the narrower field itself thus circumscribed no general review of the literature will be attempted, this being now fortunately accessible elsewhere(2), and I shall merely aim at calling attention to a few of what I consider to be the main respects in which advance in our knowledge has been made. As may be anticipated from this definition, the work chiefly dealt with will be that of Freud himself, ever the pioneer in our science.

### TECHNIQUE.

One striking new departure in technique has been made, the importance of which, however, cannot yet be estimated because it is relatively at its beginning. It consists in what Ferenczi has called "active therapy." As is well known, our methods so far have been confined to discovering and overcoming the resistances of the patient against his knowledge of

<sup>1</sup> Read before the Medical Section of the British Psychological Society, Jan. 21, 1920.  
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his unconscious, making use of the transferences for this purpose, and relying on the patient's desire for recovery as the main motive for carrying through the analysis. The rate at which this task was carried through was determined mainly by the varying psychical constellations of the patient, and so with few exceptions—such as, for example, the help derived from a general knowledge of symbolism—was largely independent of the analyst. Now it has long been observed that the patient's psychical constellation, on which the progress and duration of the analysis depends, fluctuates greatly according to both internal and external factors, and studies have been made of these varying mental states and the circumstances influencing them. It became clear, for instance, that the efforts made by the patient to carry through the analysis vary with his need of mental health and thus are usually greater in proportion to his suffering. Partial recovery from the symptoms, therefore, with consequent relief of suffering, or, again, an access of happiness from a changed external situation, very often has the effect of diminishing the patient's efforts in the analysis, so that, however glad the analyst may be of such happenings on other grounds, he has good reason to fear their delaying influence on the course of the analysis. Too much comfort, happiness, or satisfaction of any sort can on occasion be detrimental to the interests of the analysis by lowering the tension of the energy at the patient's disposal for carrying out the work needed of him, and it becomes a question whether in certain cases it may not be advantageous artificially to keep this tension up to a desirable height by deliberately forbidding the patient to indulge in various outlets for his pent-up feelings. It should be remarked that this applies to the outlets which afford an unconscious relief far more than to conscious enjoyments, and, further, particular stress should be laid on veiled forms of libidinous satisfaction, as Ferenczi(3) has well pointed out, the importance of libidinous impulses as the driving forces in the neuroses being a matter well recognised by all psycho-analysts. For this reason Freud(4) has formulated the rule that "the analytic treatment should be carried out, so far as possible, in a state of abstinence." By this he naturally does not mean abstinence from all pleasure, nor even abstinence from sexual indulgence, but only that in the situation there should always be a certain element of deprivation, one which would be removed by the success of the treatment.

In addition to the series of didactic articles he has published on the regular technique(5) Freud has pointed out respects in which 'active' deviations from this may be made according to the type of case(4).

Thus he suggests that with an obsessional neurotic one should proceed until the idea of the analysis itself has become involved in the obsessional structure and then play off this obsession against the illness. Again he remarks that one can never cure a severe case of hysterical phobia if one allows the patient to shield himself entirely from the danger of an anxiety attack by means of the phobia; when the analysis is not making progress the patient should be got to expose himself to such an attack, of course of a mild order, when his analytic impulses will be strengthened and suitable material will be brought out. Mention should also be made of a series of technical points raised by Ferenczi(6), the most valuable being a criticism of Freud's "golden rule" relating to the freedom of associations where he discusses the ways in which the patient may exploit and misuse this.

An extraordinary casuistic study of infantile sexuality which Freud has recently published(7) is of interest for both treatment and aetiology. In the light of the material there presented he discusses at great length the validity of the ultimate constructions made towards the end of a complete analysis. One is often compelled to infer a primordial scene (*Urscene*) in the patient's early life—in this case it was at the age of eighteen months—the later effects of which have been of decisive pathogenic importance, but the memory of which can no longer be recalled through any technical device. In some cases this primordial scene corresponds with a real occurrence, in others with a pure phantasy, and Freud raises the question whether such a phantasy, of which a typical example is the overhearing of parental coitus, must always have been based on some kind of individual experience or can be the product of inherited predisposition; he inclines towards the latter view. Altogether of late he has devoted much attention to clarifying the psycho-analytic theory of the aetiology of the psychoneuroses. Following on his essay entitled "Neurotic types of falling ill," which was published before the war(8), he has discussed the subject fully in his recent introductory lectures on psycho-analysis(9). He sees the course of events somewhat as follows: partly as the result of a deprivation in the outer world, the libido seeks other outlets and tends to regress to earlier stages of development, especially to the points of its 'fixation' in childhood. These fixation-points are determined partly by inherited predisposition, partly by infantile experiences or phantasies; the libido finds its way back to them *via* unconscious phantasies in which they are still represented. If nothing but this regression takes place the result is a sexual perversion. If, however, as is so often the case, the form of sexual activity



corresponding with the fixation-point is not in accord with the standards of the later ego-ideal, there arises a state of conflict between the two, in which the former is repressed and prevented from entering consciousness or from finding any kind of motor expression; this is the second, or internal deprivation. The wish in question is then subject to the mechanisms characteristic of the unconscious, displacement, condensation, etc., and can reach expression, like the wishes of a dream, only after undergoing such distortion as renders them unrecognisable in consciousness. The relative importance of the three main factors, the deprivation, infantile experiences, and inherited predisposition, Freud conceives to be variable and mutually interchangeable, thus laying stress on a new element in his theory which he terms the 'economic' one as distinguished from the 'dynamic' one. The same applies to the relative strength of the forces appertaining to the self and the sexual impulses respectively, and he points out how important for the origin of the psychoneuroses is the relative development of each of these two sets of impulses, the extent to which it is parallel in both, and so on.

#### CHARACTEROLOGY.

The first psycho-analytic contribution to this subject was Freud's article in 1908 on the anal character. The importance of this has been increasingly recognised of late years and recently I published a review (10) of what is now known of the respects in which the anal-erotic sensations of the infant influence character traits in later life; I was able to show that the extent and the manifoldness of this influence are far greater than anyone who has not investigated it could imagine. In an earlier work (11) I discussed the curiously close relation subsisting between hate and anal-erotism in both the normal and, more especially, in the obsessional neurosis, and Freud (12) has expressed the view that this combination is characteristic of a certain stage in normal sexual development which he terms the 'pregenital' stage because it antedates that in which the primacy of the genital zone is established. When, as is far from rare in adult life, there is a tendency to regression in the direction of this level of development, corresponding changes are manifested in the person's character. Abraham has further shewn (13) that there exists a still earlier pregenital stage of development, which, from the prominent part played in it by the buccal zone, he calls the 'oral' or 'cannibalistic' one; fixations or regressions in connexion with this stage also can be accompanied by typical character changes.

Freud has made a second contribution to this subject in an essay entitled "Some character types from psycho-analytic work" (14). He describes here three types. The persons of the first type are distinguished by their making special claims to be treated as 'exceptions.' It is true that we should all like to be treated by our environment as exceptions, as individuals to whom the strict rules of life should not apply as they have to with mere other people, and who should be granted special privileges in obtaining pleasure and in being spared the bitter demands of necessity. The people in question, however, not only desire this, but seriously maintain that they have an actual right to expect such special treatment on the part of their environment and of fate, and this characteristic is at times so highly developed as to render its possessor impervious to argument and quite unable to see either the unreasonableness or the impossibility of their demands. Freud illustrates the type by the example of Richard III, and states that in all the patients of the kind he has analysed he has been able to trace the origin of the character trait to a painful event in infantile life regarding which they knew themselves to be innocent and which they looked upon as an unjust injury; they then go through life claiming compensation for this in the form of exceptional treatment. It is probable that much of the specially privileged position claimed by women, and accorded to them, is the result of the idea that they were unjustly deprived of an important part of the body in early life, and the bitterness of so many daughters against their mothers is due in the last resort to the reproach that they were brought into the world as girls and not boys.

The second type, which Freud illustrates by analysis of Macbeth and Ibsen's Rosmersholm, he designates as "those who are broken by success." The subjects of this type display the peculiar reaction of breaking, usually in the form of a severe psychoneurosis, just when they attain the success for which they have long hoped and striven, thus presenting a curious paradox to the rule that a neurosis follows on some deprivation or disappointment. It is not hard, however, to solve the paradox. In the commoner cases an external deprivation leads to the internal deprivation which is the essential precursor of the neurosis, while in these rarer cases the internal deprivation alone suffices and is brought into play by the realisation of what had previously been treated by the ego as a harmless phantasy. As is well known, conscience often passes a very different judgement on the mere wish for a given action and the putting this into force in real life.

The third type Freud terms "the criminal from guilty conscience."

The persons of this type are not guilty because they have committed a forbidden act, but commit the forbidden act because they feel guilty, obtaining thereby a relief of this feeling. They displace their feeling of guilt on to the relatively mild offence, and ease their conscience by undergoing penance in the form of the punishment they provoke. Naturally the original sense of guilt had an older source, probably always arising ultimately from the Oedipus complex. It is an interesting question to ask how many actual criminals belong to this class, excluding of course those who have no scruples of conscience, and one might add that Freud's contribution throws some light on the curious fascination for the forbidden which most educators have observed.

Freud has continued his series of publications entitled "Contributions to the psychology of love," and I will refer only to the one that appeared during the war, on the subject of virginity. It is primarily an investigation of the curious fact, observed in many savage tribes, that the defloration of a woman is carefully entrusted to some other man than the future husband. After giving an account of the accompanying features of the rite, and the hypotheses that have attempted to account for it, he brings it into relation with the various reactions that psycho-analysis discovers in regard to the act of defloration. On the one hand this is often followed by a very special and lasting attachment to the man who performed the act, this being particularly marked when an unduly great resistance against sexuality had previously existed and is overcome by the first act or acts; a similar kind of 'sexual dependence' may sometimes be observed with men who had previously been impotent. At the other extreme are women who never love, and may even hate, the men who deflowered them; they are often, however, quite capable of forming a deep attachment to another man, which is a psychological reason why many widows make successful second marriages. In between these extremes are two instructive types of neurotic reaction; in one of these, where the mechanism resembles that of the obsessional neurosis, both attitudes can coexist, namely love and hate; the other, by far the commoner, is the well-known hysterical anaesthesia or frigidity, where the hostility acts by neutralising and inhibiting sexual love. Freud enumerates four grounds for the hostility in question which is so likely to be aroused by the first act of intercourse, and considers that the deepest and most important is the "envy of the penis" that most girls experience to a greater or lesser extent, and which always lies behind the wish to be a boy. The hostility thus aroused may lead to a desire for revenge on the man who finally and definitely made them

into a woman. There are good reasons for thinking that in primitive times this hostile reaction was more prominent than it is now, when it has been largely counterbalanced by the enhanced importance of psychical love, and it is to the desirability of avoiding this hostility that Freud ascribes the curious taboo of virginity among savage tribes, including the ceremony of having defloration performed by someone other than the husband.

#### NARCISSISM.

We now come to what I consider to be the two most important advances in psycho-analysis made in recent years, those relating to narcissism and metapsychology respectively. It will be remembered that the conception of narcissism formed no part of Freud's earlier theory of sex, in which auto-erotism and object-love were contrasted with the non-sexual impulses of the personality—grouped together under the name of 'ego-impulses.' It was only the psycho-analytic investigation of paraphrenia (*dementia praecox*) that led him to interpolate in his scheme of sexual development the stage to which he gave the name of 'narcissistic,' borrowing this term from the perversion which Havelock Ellis had thus christened. He regards this stage as an intermediate one between the earlier auto-erotic one and the later one of object-love, partaking as it does of the qualities of both; in it the first love-object is found, namely, the self (16). A distinction is thus made between the libidinous and the egoistic aspects of the self, and on the basis of this distinction the libido theory has been carried much farther than at first seemed possible, and has led to investigations which have thrown much light on the psychology of the ego itself; indeed, Freud sets such hopes on the results to be achieved by future researches in this direction that he anticipates they will make our present psycho-analytic knowledge seem small in comparison.

What has been learned about narcissism has been derived mainly from three sources, from the study of two sexual aberrations, homosexual inversion and the perversion called narcissism, of the mental characteristics of children and savages, and, most important of all, that of the paraphrenias; further knowledge has been gained also from the observation of hypochondria, the mental state in organic disease, and the psychology of love. These sources will now be considered in this order.

The existence of the perversion called narcissism would probably not have in itself led to any wide conception of this aspect of sexuality,



though its occurrence in a pure form is of considerable interest. It was soon found that prominent features of the same tendency towards love and admiration of the self are characteristic of other conditions, notably homosexual inversion. This is, it is true, more striking in certain forms of inversion, particularly in that generally called the passive or feminine type, but the fact itself is easily observed in all forms and has often been illustrated in literature, for example, in Oscar Wilde's *Picture of Dorian Gray*. In all analyses bearing on the subject it is found that narcissism and homosexuality are extraordinarily closely related, and the conclusion was finally reached that the relationship must be of a genetic order. By that is meant that love of one's own sex stands nearer to the primary auto-erotism and narcissism than does love of the opposite sex, and that the former stage has first to be traversed in the course of development before the latter, adult stage is reached. Homosexuality thus represents, in of course a very modified form, the undue persistence of an early phase in sexual development, one which normally is rapidly passed through in infantile life and again, on another plane, during the years of adolescence. In this connexion I may remind you of the essential part that repressed homosexuality has been found to play in the causation of chronic alcoholism, of drug habits, and of paranoia, but as the work on these subjects is no longer recent and may even be described as fairly well known I shall not dwell on it here.

In children and among primitive people are to be observed a number of traits which, if they were met with among educated adults, would remind one of the megalomaniac delusions of certain forms of insanity (17). These are especially the sense of self-importance, the egocentric attitude towards the world, and evidences of the curious belief in the power of thought and wishes with which we first became familiar in the obsessional neurosis in the symptom known as belief in the "omnipotence of thought." This is doubtless the key that leads to the understanding of magic, the belief in the magical power of words, and so on. Such observations confirm the conclusions arrived at elsewhere that narcissism represents a primitive stage in development.

It was, however, the study of paraphrenia that has thrown the most light on the subject. The first point was one made by Abraham, as long ago as 1908 (18), who concluded that the withdrawal of libido from the objects of the outer world was of central importance in paraphrenia (dementia praecox), and attributed the characteristic megalomania and egocentricity of the disease to the return of this libido to the self. Attention may be called to the use of the word 'return' in this connexion.



It indicates the view that all libido externally directed emanates originally from self-love, is, so to speak, an outpouring from this central source, and that it can be later withdrawn from the external attachment. It is considered, further, that within rough limits there is a mutual reciprocity between the amount of libido which remains attached to the self and the amount finding external expression. In the course of a person's life libido frequently oscillates between internal and external expression according to the opportunity for external attachment and other circumstances. A certain freedom of movement of the libido in both directions is requisite for mental health, though this of course varies to some extent in different people. The characteristic of paraphrenia, on the other hand, seems to be a curious adhesiveness of the libido which makes it difficult or impossible for it to flow externally again after it has once been withdrawn to the self. Paraphrenia differs from the psychoneuroses in that the object-libido is re-converted into ego-libido, whereas in the latter, although it is similarly withdrawn from the objects of the outer world, it remains attached to phantasies of them, as we are aware from our studies of the unconscious mental life of neurotics. When the ego can absorb this quantity of dammed up libido there results the familiar megalomania, which corresponds with the introversion of the neuroses; when it fails to do so there results hypochondriacal anxiety, which is homologous to the morbid anxiety of the neuroses. Constant efforts are made to get the libido to move once more outwards, and it is these efforts which produce most of the startling symptoms of paraphrenia described in the text-books; it is interesting to note that these usually described symptoms are really not at all symptoms of the disease itself, but of healing processes, the spontaneous efforts towards recovery. It may be said that a given case of paraphrenia presents three groups of manifestations: (1) those of the normality that still remains; (2) those of the disease process, such as the withdrawal of love and interest from the outer world, the megalomania, regressions, and hypochondria; (3) those of recovery, including the delusions, hallucinations, and most of the striking changes in conduct, all due to anomalous attempts to effect a fresh contact with external reality. After this introduction we shall leave the topic of paraphrenia for the moment, returning to it later in connexion with that of the structure of the unconscious.

Ferenczi (19) has called attention to the significance of the banal observation that the subject of organic disease, especially of a painful one, commonly withdraws his love and interest from the outer world,

the former more strikingly than the latter. In terms of the libido theory one would say that he has withdrawn, more or less, his libido from its attachment to external objects and concentrated it on himself, to let it once more flow outwards when he recovers. With a chronic disease this process may lead to local regressions and the formation of hysterical symptoms—an example being a nervous cough as a sequela to whooping-cough—a condition to which Ferenczi would give the name of ‘patho-hysteria’; it differs from the rather closely allied ‘fixation-hysteria’ in that the libido disturbance is secondary to the organic disease instead of being primary to it, as it is in the latter condition. These patho-neuroses are to be distinguished from hypochondria, which has in common with them the association of bodily pain with narcissistic regression, by the fact that in this latter condition no organic changes are known to occur in the organs concerned; but Freud surmises that though this is so there may nevertheless be functional changes in these organs. He draws a comparison between such a painful and tender organ, which is somehow changed from its normal state and yet is not diseased in the ordinary sense, and the state of erection, in which an organ is swollen, congested, and the seat of manifold sensations. It has long been recognised that various parts of the body have an erotogenic capacity, that is, a capacity for having erotic sensations aroused in them and of behaving more or less like genital organs, and Freud thinks there is reason to believe that erotogenicity may be a function of still more parts of the body than we had assumed, including many internal organs. If that is so, it may prove that the meaning of hypochondria is to be found in disturbances of the local distribution of the libido, or in changes in local erotogenicity, changes in the organs which would then produce results not dissimilar from what we see in many cases of organic disease, namely narcissistic regression.

A sphere in which the importance of narcissism is clearly to be discerned is that of love. As is well known, infantile experiences and relationships commonly exert an influence on the later choice of a mate, particularly, for example, in the impulse to seek someone to whom one can look up, as a child admires and looks up to his parent; the attitude may of course go on to the further stage of desire for a partner who will protect, sustain, and support one. In many analyses, however, particularly in those of homosexuals, it has been found that the love choice proceeds quite otherwise, it being dictated not by the characteristics of the parent, but by those of the person himself; this may therefore be called the narcissistic type of choice of object. The two types are rarely

pure, most people showing the capacity to choose in either direction or in a mixture of both. There are interesting differences between the two sexes in respect to these two types of choice, though one should add that such generalisations are rough ones, subject to many modifications and exceptions. On the whole, however, it may be said that the first-mentioned type is more characteristic of the man and the second of the woman. The man more often attains the highest degree of object-love in which honour, respect, or even adoration is shown for the woman to whom he looks up. This 'sexual overestimation' of the object doubtless originates in the child's narcissism, which is transferred first to the parent and later to the mate. In the early stages of love so much libido flows outwards towards the object that the ego is relatively depleted, and a sense of personal inferiority and unworthiness results, the extreme forms of which, the lover's doubts and moans, have often been depicted by poets. It is only when the love is answered that a state of equilibrium in the personality is restored and the ego again becomes rich. The most typical form of love among women, on the other hand, is not so much the desire to love as the desire to be loved, and they become attached to the man who best fulfils this condition; this is especially true of beautiful women. A successfully carried out narcissism exerts a peculiarly strong attraction on many men, particularly on those of the most manly type. The appeal of the child to our affection is of a similar nature. It is as though one envied those who have been able to retain that happy mental state which the realities of life have forced one to give up oneself. There are nevertheless various ways in which the woman can also attain to full object-love. The most obvious is through her child, by means of which the narcissism gets transferred on to an external object, which was originally part of herself. Another way is that she may form a masculine ideal somewhat on the lines of the masculine traits of her own childhood, which have been suppressed as the result of the changes accompanying puberty.

To sum up the influence of narcissism on the choice of a loved object: the narcissistic type may fall in love with

- (a) What one is oneself (or, indeed, actually with oneself).
- (b) With what one once was.
- (c) With what one would like to be, one's ideal.
- (d) With what was once a part of oneself, the child.

It may be added in connexion with the last-mentioned example that the narcissism of either parent may easily become transferred in excess to the child, to the great detriment of the latter. Many parents, in their

characteristically narcissistic over-estimation of their child's virtues and overlooking of his defects, in their desire to spare their child all the necessary hardships of life, in their ambition that the child should fulfil their own unsatisfied ideals, once more renew in this way their own long lost narcissism.

Freud then develops the theme of the evolution of narcissism in the individual, and the disturbances to which it is exposed in the course of growth. It rapidly gets restricted through the agency of many factors, among which that of the castration complex in boys, the envy of the penis in girls, often attains a pathogenic significance. It is probable that the ego-libido never becomes entirely transformed into object-love, but what does not become so transformed does not necessarily remain in its original state. Another important part becomes displaced in the interesting process which Freud calls the formation of an ego-ideal. This is largely built up from social and ethical ideas implanted by the parents and other educators, and the love which in infancy belonged to the real ego now gets transferred to the ideal one; the narcissistic origin of ideals explains much of their otherwise inexplicable strength and importance in life. The difference between the process of idealisation and that of sublimation seems to be somewhat as follows: in sublimation there is a deflection away from a sexual goal, which is by no means necessarily the case with idealisation, for a sexual object itself can be idealised. Sublimation is purely a matter of the object-libido, idealisation can concern either object-libido or ego-libido. Sublimation refers rather to a change in the impulse, idealisation in the view taken of a given object. The two processes are therefore not identical. For instance, idealisation usually calls for sublimation, but it does not follow that this will take place, for that depends on other factors: in neuroses it is common to find undue idealisation combined with defective power of sublimation, leading therefore to intense conflict between the ego and the libidinous impulses. Idealisation greatly favours repression, and represents the part of the ego opposed to repressed tendencies; sublimation represents one of the outlets for such tendencies.

Freud considers that there is a special faculty present in the ego the function of which is to assure the narcissistic satisfaction given by the ego-ideal, and he identifies it with the conscience. In a study of the delusion of observation he points out that here there occurs a dissociation of this faculty from the rest of the ego, when the patient hears the voice of conscience projected as an outer voice. He further identifies this watching conscience with his dream censorship, the existence of



which—or rather the name for which—has been the matter of so much criticism in this country. In a similar connexion he makes a number of contributions to the subjects of self-confidence, the psychology of love, and the understanding of crowd psychology, which I have no space here to consider.

The application of the theory of narcissism to the subjects of dreams, sleep, and melancholia will be discussed presently, and I shall close this section by a few remarks on its relation to the problems of war shock. Basing myself on Freud's recent analysis of the nature of normal fear and its relation to neurotic anxiety, where he dissects it into the three components of anxious preparedness, suitable motor activities, and the state known as developed anxiety, I have sketched a theory of the fear which undoubtedly is behind most, or all, of the symptoms of war shock(20). My suggestion that this emanates from repressed ego-libido, so that war shock would rank as a narcissistic neurosis, has been independently confirmed by Abraham, Ferenczi, and Simmel(21), and has also been borne out by my experience in the two years that have elapsed since writing on the subject. This experience has also strengthened my suspicion, which I did not mention at the time, that repressed homosexuality plays a prominent, and perhaps essential, part in the aetiology of this neurosis. It is likely that the same holds good for all cases of traumatic neurosis, but our experience here is as yet too limited to make definite statements.

#### METAPSYCHOLOGY.

In the last couple of years Freud has made a number of tentative beginnings towards the investigation of a new branch of science to which he gives the name 'metapsychology'(22). He suggests this term to denote a psychology which will regard every mental process from three points of view: namely, the dynamic, the topographical, and the economical. Interest in these points of view does not indicate an altogether new tendency in his work, for there have been hints of them even from its first inception, though they have certainly been insufficiently appreciated by those who have concerned themselves with psycho-analysis. To take them in order: Freud has always been less interested in the mere interpretation of symptoms, dreams, slips of everyday life, and other material he has analysed, than in the *dynamics* of the mechanism producing these phenomena, thus differing from most of his readers and perhaps also of his followers. It may indeed be said that, although his interpretative work has perhaps been more sensational and has cer-



tainly attracted more the attention of the casual reader, nevertheless, indispensable as this was, it is not really so important as his discoveries regarding the actual forces at work and their relation to one another. This dynamic conception, for example of the neuroses, represented a striking advance on the more static conceptions of Janet and Morton Prince. In speaking of Freud's *topographical* conception of the mind one refers to his endeavour to survey mental processes from the point of view of their psychical locality, to learn something about the spatial relationships of different mental functions. He holds that mental processes will possess certain characteristic attributes according to the region of the mind in which they are; the differences between consciousness, the preconscious, and the unconscious are the great exemplifications of this. By an *economical* point of view Freud means one in which the attempt is made to ascertain the laws covering the production, distribution, and consumption of definite quantities of psychical excitation or energy according to the economic principle of the greatest advantage with the least effort.

Freud has approached this subject in a series of five essays<sup>(22)</sup>, and I shall select a few of the main points from them in order. He begins with an attempt to clarify our psychological conceptions of instinct, and, starting with the physiological conception of the nervous system as a reflex apparatus the function of which is to avoid stimuli or abolish their effects, he points out the differences between stimuli of instinctive origin and those emanating from without. Because the former cannot be dealt with by any form of motor flight, as the latter can, but only by complicated ways of altering the outer world so as to bring about suitable changes in the internal source of stimulation, known as satisfaction, he considers that it is the instincts, and not external stimulation, which are the true causes of progress and have led to the present complexity of the nervous system. As the mind seems to be regulated throughout by the pleasure-pain principle, he thinks that this must mirror the way in which stimuli are dealt with in general, and he correlates pleasure with a relief of excitation and pain with an increase of it. After a number of considerations on the nature and characteristics of instincts in general, and the fate they undergo in development, he illustrates his views by taking the example of the sexual instinct, the one which the nature of their material has compelled psycho-analysts to study most fully. The destiny of such an instinct would seem to lie in one of four possible directions: reversal into its opposite; turning against the subject; repression; and sublimation. It essentially depends on the instincts being

subjected to the influence of the three great polarities that govern mental life, namely, the *biological* one of activity—passivity, the *real* one of self—outer world, and the *economical* one of pleasure—pain. The inter-relationships of these three polarities, which sometimes coincide with and sometimes cross one another, are distinctly complex, and are discussed by Freud at some length. For instance, the contrast of active and passive cannot be identified with subject and object (self and outer world); the subject is passive towards the object in so far as it receives stimuli from it, active when it reacts to these, and especially active towards the outer world when stimulated by an instinct. Again, subject and object can only be identified with pleasure and pain (or indifference) respectively in the beginning of life,—soon the subject is separated into a pleasurable part and a painful part which is projected into the outer world, while at the same time the outer world is divided into a pleasure-giving part which is incorporated (introjected) into the self and the opposite of this which remains distasteful or indifferent, the stage being thus attained which Freud refers to as that of the “purified pleasure-self.”

The first two processes mentioned are dependent on the narcissistic organisation of the ego, and show traces of this in their development. The *reversal into the opposite* may occur in two quite distinct ways. There may be a change in the instinct from active to passive, such as from sadism into masochism, ‘observationism’ into exhibitionism, loving into being loved, or there may take place a reversal of the content, of which the only example known is from love into hate. Freud analyses fully the genesis and relationship of love and hate, and shows that they are not simple opposites. He maintains that they arise from independent sources, that hate rather than love represents the earliest attitude towards the outer world, that hate stands throughout in the closest connexion with the instinct of self-preservation, and that the apparent transformation of love into hate sometimes seen is not so much what it appears to be as a regression to a sadistic pre-genital level in which the erotic relation to the object is still preserved. The *turning against the subject* is a change in the instinct which is curiously related to the one just considered. Freud illustrates it by tracing in detail the genesis of the two pairs, sadism-masochism and observationism-exhibitionism, and holds that the first mentioned of these in each pair is always the primary. He finds that, for instance with sadism, the active attitude is first manifested towards an object in the outer world, then turns against the subject (at which stage it remains in the obsessional neurosis, in the form of self-torture), and only then is changed to the passive one of

masochism by getting an object to play the active part; even here, however, the person probably obtains a double pleasure, on the one hand sexual excitement at suffering pain, and on the other sadistic enjoyment through unconscious identification of himself with the active object.

In the next essay Freud discusses the third of the above-mentioned possibilities, namely, *repression*. Repression is something between flight and condemnation by judgement, its sole function being to avoid the pain that would be inflicted on the ego through the pleasurable satisfaction of one of its instinctive impulses. Its essence consists in the keeping from consciousness knowledge of the impulse. It is not the earliest form of defence mechanism against an impulse, being preceded by the two discussed above, the reversal of an impulse and its being re-directed against the subject. The repressions of later life are only possible in regard to derivatives or other connexions of the primordial repressions which take place in infancy. The representatives of an impulse in a state of repression undergo special changes and forms of growth. The state is maintained by a pressure steadily exerted from the direction of consciousness, but it is a mobile and variable one, depending on many factors. The derivative of a repressed complex, for example, finds its passage into consciousness easier the more distant is its association with the complex, the greater is the distortion it has undergone, the weaker is the energy with which it or its complex is charged, or if special technical devices are present, the best known of which are those of wit. The aim of repression may be said to have failed, even though the given idea is kept back in the unconscious, when the accompanying affect leads to distress (*Unlust*) in consciousness, usually in the form of morbid anxiety. Repression would seem to be always accompanied by the formation of substitutes, though the two processes only occasionally coincide in form, for instance in the reaction-formations characteristic of the first stage of the obsessional neurosis. The formation of symptoms is not an immediate result of repression, but is due to what Freud terms "the return of the repressed material," and of course only occurs when special conditions are fulfilled. He then illustrates his views by a comparison of the mechanisms in the different psychoneuroses. He remarks that in conversion-hysteria the repression more often succeeds in its aim of abolishing pain from consciousness than in anxiety-hysteria, referring to the familiar "*belle indifférence des hystériques*"; the success is of course not always complete, for many bodily symptoms are disagreeable, and further, the formation of so many substitutes can prove of serious disadvantage in life.

The third essay Freud devotes to the nature and relationships of the *unconscious*. He begins by defending with a convincing logic the justification for accepting the idea of unconscious mental processes, but I do not think I need detain this society with the arguments used, though they should be of interest to the philosophers who still refuse to accept this idea. He then points out the confusion there exists between the conception of the unconscious as simply comprising all mental processes of which we are not aware and the more recent psycho-analytical one of a system or region of the mind having certain peculiar characteristics. In this connexion the difficult question is raised of the precise difference between an unconscious idea and a conscious one, and what happens when the former is converted into the latter. Of the two possibilities, a topographical conception according to which a fresh imprint of the idea is formed when it is made conscious, so that the old imprint can still subsist in the unconscious, and a functional one according to which a change occurs in the state of the idea, he inclines for various reasons to the latter, but points out later on that the difficulty comes partly from the question having been badly put, and that the essential change is of another order, which we shall presently come across. In discussing the vexed question of whether the unconscious comprises affects as well as ideas, he concludes that the real effect of repression is to hinder the excitation of an instinct from being transformed into affective expression, and that it owes this power to the circumstance that the outlets to affectivity (the bodily accompaniments of emotion) are to a great extent under the control of the preconscious, though, it is true, not so completely so as are the outlets to motor activity. When the repression is unsuccessful the affective process is able to develop, usually in the form of morbid anxiety, but in most cases only after a suitable substitutive idea in the preconscious has been discovered, to which the affect becomes attached; an outlet is in this way afforded for the affect. In repression the preconscious is invested with a counter-charge<sup>1</sup> (of interest, etc.), and if the repressed idea has ever been preconscious itself it is divested of its preconscious charge, which is probably used to reinforce the counter-charge, while it receives itself another charge from its unconscious associations. Almost always a substitutive idea in the preconscious comes to replace the repressed one, and the preconscious counter-charge is then localised to this. The whole process is beautifully illustrated by the growth of a phobia. The repressed impulse

<sup>1</sup> I use the word "charge," taken from the science of electricity, to translate the German *Besetzung*.



can manifest itself only in the form of anxiety, and this very soon gets attached to a suitable symbolic idea in the preconscious, which now can be stimulated either by an urge from the repressed impulse or by contact with the object corresponding to the idea, for instance an animal. If the person succeeds in altogether projecting the idea outwards he is safe from an attack of anxiety so long as he can, by suitable measures, avoid the external stimulation of the idea; he can then treat an instinct like an external stimulus and deal with it by means of flight. In most cases, however, the forward urge of the unconscious impulse compels him to localise the substitutive idea still further by investing its preconscious associations with a further counter-charge, a process which can go on indefinitely; this is what is called clinically the radiation of the phobia.

Freud goes on to enumerate the characteristics of unconscious mental processes. They are incapable of mutual contradiction, contain no idea of negation, and have no relation to time or to external reality; they are regulated solely by the pleasure-pain principle, and show the attributes of what Freud in the *Traumdeutung* called the 'primary process,' *i.e.* they undergo condensation and displacement with extraordinary freedom. Preconscious processes have exactly the opposite characteristics, a special feature being the capacity to inhibit any tendency towards discharge on the part of a significant idea. As to the relations between the two mental systems: the unconscious can be only slightly influenced from the side of consciousness; a very sharp division between the two is a mark of morbidity. When certain conditions are fulfilled, even a repressed unconscious impulse can cooperate with and reinforce a conscious one, without altering its state of repression otherwise. Preconscious derivatives of unconscious impulses have peculiar features, and are subject to a second censorship before being allowed to pass from the preconscious into consciousness, one which is non-existent for other preconscious processes.

It is from the study of paraphrenia that there is most to be learned about the differences and relationships between the unconscious and consciousness. In this disease a striking feature is the way in which the patients will utter freely what one would have expected to be unconscious and repressed, the censorship between the two mental systems having apparently been abolished, and the question arises what is the connexion between this and the other fundamental feature mentioned earlier, namely, the withdrawal of the libido from external objects on to the self. This difficult problem has been interestingly solved by Freud through a study of speech in paraphrenia, in a way that also throws



light on the whole matter of the difference between conscious and unconscious ideas. He starts from two fairly familiar observations and one original one. The first is the tendency paraphrenics have to express their ideas in terms of their bodily organs, so that one might term their language an 'organic' one. The second is the notable extent to which words are with them subject to the 'primary process' of condensation and displacement, with which one otherwise only meets in the unconscious. The new observation was that symbolism in paraphrenia depends far more on the idea of words than on that of things, and reflection on this brought Freud to realise that the most fundamental distinction between a preconscious idea and an unconscious one is that the former is made up of an idea of the object together with an idea of the corresponding word, whereas the latter consists only of the idea of the thing. From this conclusion follows an explanation of many important features of mental development, especially as regards the function of consciousness, which there is not time to expound here. It may be remarked incidentally that what repression of an unconscious idea essentially resists is its being translated into the words connected with the object. As to the paradox in paraphrenia that in spite of the withdrawal from the outer world, which one would expect to affect most the more conscious levels of the mind, it is nevertheless the conscious attributes of thought, namely, words, that are most heavily charged with interest, Freud thinks that this feature represents a secondary healing process, an attempt to regain contact with the outer world, which takes a path that is on the whole the reverse of the normal, proceeding, that is to say, from consciousness towards the unconscious.

In the fourth essay Freud reviews the theory of *dreams* in terms of his metapsychology, and in the light of the recent conception of sleep as a state essentially consisting in a restoration of the most complete form of narcissism, the wish to return to the mother's womb. As is known, the dream is the way in which the mind deals with disturbing thoughts from which it has failed to withdraw all interest, as it has done with other thoughts. These preconscious thoughts, remains from the mental activity of the preceding day, get reinforced from the stirring of an unconscious impulse with which they have become associated either on the day before or during sleep, and build thus a wish-fulfilment phantasy, the ideas of which undergo both a temporal and a topographical regression to the primary perceptual system. The results of this regression are projected outwards as on to a stage and are accepted by consciousness as complete reality. The formation of dreams shows interesting

differences from that of paraphrenic phenomena. In the latter there is no topographical regression, only a temporal one. In paraphrenia words themselves are subject to the 'primary process' of condensation and displacement: in dreams this is only exceptionally the case, namely, with words heard or read on the preceding day; otherwise any dream operations on words are only preparatory to the regression to the ideas of objects, and it is these ideas that are subject to the 'primary process.' In paraphrenia there is no intercourse between the investments of words and those of objects, in dreams such intercourse is unusually free.

Freud then discusses the nature of hallucination and the way in which consciousness is deceived as to its reality. He finds, by comparison of dreams with various psychotic states, that this deception can occur only when a thought has undergone regression through the unconscious memory-traces of objects to the primary perceptual system, and considers that the capacity to distinguish reality from illusion is a function of this system, the fundamental test being the ability to abolish a perception by means of appropriate motor activity. He regards this 'testing of reality' as one of the distinct institutions of the ego, by the side of conscience and the censorship, and points out that in acute hallucinatory confusion (Meynert's amentia) this becomes split off from the rest of the ego. Consideration of the topography of the repression process in different conditions leads to the conclusions that in dreams all systems of the mind are divested of their charge of interest, in the psychoneuroses those of the preconscious, in paraphrenia those of the unconscious, and in Meynert's amentia those of consciousness.

In the last essay of the series Freud solves many of the riddles of melancholia, as he has before those of many other neurotic and psychotic affections. He starts by analysing the dynamic mechanisms operative in the state of normal grief, by means of which the desire to live is ultimately enabled to triumph over the wish to die and share the fate of the lost object, and love becomes gradually released from its former attachment and free to form new ones. Melancholia differs from this normal process both in its outcome and in certain of its manifestations. The symptoms of painful depression, abrogation of interest in the outer world, loss of capacity to love, and inhibition of effort, are common to both, but, whereas in grief it is the world that is felt to be poor and empty, in melancholia it is the self that feels poor, worthless, and pervaded with a conviction of (especially moral) inferiority. Further, the loss that has been endured is an unconscious one, not, as with grief, a conscious one. Careful observation shows that the abuse which a melan-

cholic heaps upon himself really represents complaints directed against a person he formerly loved, and this is the reason why he is not ashamed of his supposed deficiencies and does not behave as though they were true, conducting himself rather as someone who has been unjustly wounded. What has happened is that after some disappointment or injury connected with the loved person he has withdrawn his love from this object, but instead of transferring it to a new one, as the normal person would, or introverting it on to unconscious phantasies, as the neurotic does, or, again, applying it to the ego, as the paraphrenic does, he replaces it by a narcissistic identification of the self with the former object, there being in this process doubtless a regression to the original narcissistic way in which he fell in love. Analysis seems to show that three conditions are necessary for this outcome: first an actual loss, as in grief, though the loss is more often due to disappointment than to death; secondly the combination of a strong narcissistic fixation on the loved object with a lack of resistance in its investment; and thirdly a marked ambivalency, as in the obsessional neurosis. The ego thus becomes split; one part, to which the conscience belongs, can criticise, abuse, and hate the other part formed by fusion with the idea of the object. It is this ability to treat the self as an object which makes suicide possible, and there is an interesting discussion of this matter. Freud incidentally contrasts the narcissistic identification present here with the common hysterical identification, in which, on the contrary, some connexion with the idea of the real object is retained. The fixation-point characteristic of melancholia, which is intermediate between the fixation-points of paraphrenia and the obsessional neurosis, he places in the first pregenital stage known as the oral phase of the libido; doubtless to be correlated with this is the fact that also the psychology of melancholia is intermediate between that of these two affections. He does not maintain that his conclusions are valid for all forms of melancholia, and thinks it possible that certain forms might be produced by a toxic impoverishment of the ego-libido. In conclusion he discusses the more obscure problem of mania as representing the triumph of the opposite side of the ego in the intrapsychical conflict.

At the end of this review I am even more conscious of its deficiencies than I expected at the beginning to be, and can only hope from it that it will serve to stimulate some of you to study at first hand the works with which I have dealt so inadequately. It is only fitting that I should conclude by expressing one's gratulation and indebtedness to Professor Freud that he has been able to accomplish so much in the most trying and difficult circumstances.

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# THE PATHOGENESIS OF EPILEPSY

A SURVEY OF THE CLINICAL STUDIES OF PIERCE CLARK

By C. STANFORD READ

Very largely through the influence of Freudian teachings we have of late tended more and more to regard nervous and mental diseases from a psycho-biological point of view, and in this respect non-symptomatic epilepsy has been studied with the result that its essential pathological basis may be found to be mainly a psychological one. The old idea of epilepsy as a disease entity is passing away in favour of its recognition as a syndrome in which the seizure is the most striking of many symptoms. Various theories of its aetiology have been put forward from time to time, many of them dogmatically, but none of them can be considered as satisfactory, whether they deal with chemical blood derangements, mal-functioning of endocrine organs, or an indefinable cortical irritation. It is certain that our advance in knowledge has been hampered by clinical interest having been centred on the fit itself, while the mental state of the individual in the inter-paroxysmal period has received but little attention until recently. Nevertheless neurologists and psychiatrists have long recognised the peculiar traits of the epileptic constitution. In the mildest forms we note an alteration of the total personality, in a higher degree we can speak of the epileptic 'character,' and beyond this we find the epileptic psychosis. Vogt declares that the epileptic character is a peculiar mixture of psychic components which are mutually antagonistic. Obstinacy and contrariness may exist with a high degree of docility, apparently based on change of moods. Mendacity and ethical perversions may be seen with piety and pleasing speech; openness contrasts with distrust, misanthropy with childlike cheerfulness. One notes a general tendency to ethical degeneration. The subject becomes quarrelsome, unsocial, is inclined to lie and employ violence. Irascibility, egocentricity, impulsiveness, and a shallow religiosity are all so marked in extreme cases that the epileptic patients in our mental hospitals are a constant source of trouble and require great tact in supervision. Notwithstanding this recognition of the epileptic's anomalous character, the deeper currents of his mentality and the maladapting factors which are so often seen prior to his attacks have until recently received but scant notice. Féré, however, believed that the character and manner of epileptics could easily cause suspicion of the disease long before the convulsions appeared, and other observers have noted that there is always a virtuality of explosion, a deep irritation of which the convulsion is the maximum term. The potential accumulates until a discharge results.

Clinical experience during the late war has largely unified our conception of abnormal nervous and mental reactions, so that the dividing line between hysteria and epilepsy has been more and more difficult to establish, and authoritative observers have on analysis tended to find similar mental mechanisms producing the two conditions. It is quite certain that typical epileptic seizures frequently took place as frank reactions to particular en-

vironments and specific situations. In some of my epileptic admissions at 'D' Block, Netley, during the war, I was struck with the prolonged unreasoning violence often shown in an unconscious state. Such observations have led to the belief that in some way the fit represented emotion of an aggressive type. Psycho-analysts have endeavoured to analyse the mental material that might lead to such an outburst. Jung of Zurich found signs suggesting that the emotional tone in the epileptic was unusually lasting, and in his association experiments found good evidence of egocentricity. Stekel regards the epileptic as a repressed criminal, and a convulsion as a substitute for the criminal act. He believes that epilepsy is, more often than we have hitherto thought, of psychogenic origin, and that there is a strong tendency to criminality which is unbearable to consciousness. Some cases that came under my care at Netley, the analyses of which I published<sup>1</sup>, bore this theory out.

It has nevertheless been left to Pierce Clark to make an intensive study of the epileptic mentality, and by his painstaking work he has been enabled to put forward a highly interesting hypothesis of the nature and pathogenesis of essential epilepsy from which therapeutic suggestions are naturally deduced. It is at once obvious to those who read his literary contributions that his theories are not the result of wild speculations, but the inevitable outcome of observation and psychological dissection of the case material he dealt with. From his study Clark brings forward two fundamental principles which he and others regard as largely established. First, that those individuals who later develop essential epilepsy invariably present a special make-up or epileptic constitution, the core of this anomaly in the personality consisting of an extremely hypersensitive and egotistical temperament with all that such characteristics entail. This biological defect renders the individual incapable of adequate social adaptation, so that adult reactions become necessarily abnormal. In the second place this inability to inhibit egotistical trends in the face of social demands results in an evasion of the difficulties by a loss of consciousness—the epileptic fit. Naturally one will see a definite relationship between the amount of environmental stress and the degree of temperamental and somatic defects. Where the latter are slight, the definite epileptic reaction may not appear until special adaptive demands are made, such as at puberty or later, but when the constitutional defect is extreme, the smallest amount of stress may be provocative of a severe and progressive epileptic state. In those who are least adaptable, the epileptic reactions may develop as soon as the child comes into contact with his environment. There may be no patent mental conflict, or what exists may be vague and below the threshold of consciousness, portraying itself in a nameless dread or a general irritation against the simplest demands of the instinctive life. In such cases the simplest accidents of fright, or startle from quiet sleep, or the induction of a cold bath, may cause loss of consciousness and a convulsion.

The fit is looked upon as a psychobiological reaction which acts as a refuge from an intolerable adjustment demand and also constitutes a regression to a pleasurable primitive state. In Clark's opinion this regression harks back to the *mutter lieb*, to the perfect peace which is supposed to have existed in the mother's womb, a state of metroerotism, as he terms it. As he points out, it is no uncommon sight in institutions to see the highly demented epileptic

<sup>1</sup> "A study of epileptoid cases in soldiers." *Journal of Abnormal Psychology*, vol. XIII, No. 1, April, 1918.

in bed entirely covered up by the bedclothes which when removed reveal him lying in the same attitude as the foetus assumes *in utero*. He thus shuts out the external world and to the best of his ability reconstructs his primitive environment.

Whether many would go so far as to accept such an hypothesis, Clark thinks it may be considered as proven that (1) there is a more or less constant affective defect in all epileptics, sane as well as insane, which is due to an inherent make-up of the psyche, and that from this an intellectual and emotional deterioration is gradually developed which, if not corrected, will end in so-called epileptic dementia; (2) the epileptic change proceeds from the mental make-up of the individual long before his malady reaches the convulsive stage which is but a further step of the former. Somatic defects may be present, but when found are only regarded as contributory to the production of the fit phenomena in later life, and the main fault in the psychobiologic defect is insisted on as being in the psychical sphere. Clark's writings abound in excellent case-histories to illustrate his thesis and his early ones show that the roots of the epileptic constitution exist in earliest childhood, how the epileptic picture gradually evolves therefrom, and how the fit becomes a natural sequence. Notwithstanding its length, it seems essential to quote one of his cases in order to grasp his meaning more adequately.

A young girl of 22 years of age has had *grand mal* attacks since her eighteenth year. *Petit mal* attacks have occurred at varying intervals of weeks and months since she was 16, and are brought about by undue excitement, annoyance or any excessive stress. She feels irritated, then sullen and depressed, then 'something bursts through,' and an attack occurs. The *grand mal* attacks are but a further and more intense elaboration of the *petit mal*. While still unconscious or confused after an attack she talks baby-talk and acts like an infant, cooing and petting her mother's face or arm, and often says, "Mumsey, I wants dinky." She then snuggles down in bed, often assumes the foetal position, drawing the bed quilts tightly around her and over her head. Tongue-biting and passing urine often occur, and the usual symptoms of a *grand mal* attack are present. She suffers no apparent intellectual impairment, and has produced artistic works of considerable promise and worth. Ordinarily she would pass current in society as a refined and cultured young lady. We shall now note how the instincts underwent development and what part they play in the attacks above outlined.

As a child she was self-centred and early had definite set views on just how things should be done. When she could not get her way she got square with the states of irritation by day dreams and fairy tales. She never got interested in things and kept at them. She had a very lively temper and was not sociable, preferring to be by herself in her dream world. Life in a large city oppressed her and she felt fearful all the time; in a few years she moved to a small town where her family were the principal society folk of the community. She lost much of her outward irritability and became more sociable, dreamed less and seemed more willing to direct her interest and energies into better efforts to 'grow up' and get an education. She began to have better health, there were less headaches, and she slept better. However, the dream world of greatest satisfaction was ever her refuge when she became irritated or depressed; she soon began to transfer the useless wonder-world of fairy tales to that of poetic composition and story writing. The central themes of these stories were mother, childhood, the sea, and the dream fancies of infancy. Soon she grew

openly antagonistic towards the mother and her authority. She could not bear to obey her, and yet in her fancy she day-dreamed and wrote of an ideal and harmonious relationship between mother and child. She says: "My mother is English; she is very set and stubborn and never acknowledges her mistakes even though the argument is against her." To meet this situation our patient often selects two or three points that are in her favour and thus 'saves her face' by such argumentative subterfuge, and she finally declares: "You see I am right after all." As regards her literary work, which began in her twelfth year and was discontinued when the epilepsy finally broke out, she says: "I wrote largely to relieve my feelings, bruised and harassed by an uncongenial and unsatisfying environment. Then when the 'stuff' worked itself up to a sufficient satisfaction, I got it on paper and felt relieved and satisfied." Then with a show of keen insight, she says: "You see I can't write any more now that I have attacks; the attacks let it all out of me so I have no themes or things worth while to say."

Just before the *grand mal* attacks came on she made an effort to sublimate the increasing demands for expression by physical activities, but she was naturally lazy and sluggish from childhood and this effort failed. She grew more morose and distrustful, and her shyness and unsociability became marked. She says: "I began to see that the close and intimate harmony with my mother which I desired and which I tried to sing of in my poems was all foolishness, and I went into open revolt against my mother's plans." Since this independent attitude asserted itself the mother, not knowing of the various internal struggles and incomplete satisfactions of a make-believe life which the daughter had led, insisted more fully that she should give her her confidence and respect. The daughter could not do this, and the fragment or wraith of a former poetic harmony disappeared. She then became definitely outspoken in her antagonism to the mother, had 'fits of temper,' sulked and hid herself from society. She became fond of argument and attached much importance to her position and views; she grew pedantic and set in her ways, and would not take on a college training as the rigid life of obedience and acquiescence fatigued and exhausted her. The irritation increased, she had fearful dreams, and headaches came on daily, except on Saturdays and Sundays, which days she spent as she pleased. She could not adapt herself to the college work and finally had a severe *grand mal* attack and then was quite all right again for a time; but slowly the old irritation came back. There were days of annoyance which were followed by 'blue' periods—a state in which she was not particularly depressed but in which she seemed to suspend consciousness of her environment. She did not talk, read, or do anything, yet could be easily aroused from the lethargy. Usually these 'blue' periods were followed by emotional storms of temper lasting two or three days, or she had attacks, after which the mental skies were cleared for a time. It may be said that just before the first *grand mal* attack at college she had been very homesick as well as unduly 'badgered' by the exacting college discipline, and that after the *grand mal* attack, while still in the automatic state, she fled from her room screaming for her mother.

In this case we see much of Clark's pathogenetic theory well justified. Early in life the patient showed evidence of an egocentric disposition and the unhealthy reaction of fleeing from reality into a dream world when her will was thwarted. Her mal-adaptation to her environmental conditions increased so that she became asocial, irritable, and openly antagonistic to authority.



Her attempt at sublimation of her increasing demands finally failed and after a period of increased irritability the first *grand mal* attack appeared.

It is true that the desire to negate reality, to become introverted and live much in phantasy, is by no means peculiar to the epileptic; for such tendencies are perhaps part of a fundamental trend which is common to many abnormal reactions. It is the whole clinical picture with a detailed life history that will demonstrate the epileptic temperament, which experience based on knowledge of these facts will confirm. Psycho-analytic findings have shown that it is in the instinctive life that we must search for the sources of abnormal adaptive behaviour, and Clark points out that in childhood the psychopathic disorders have their origin, not upon a full adult elaboration of a complicated psychic process, but upon the plane of inhibition and control of the impulsive, instinctive, reflex and ideational life of the child. Hence we should expect epilepsy to appear mostly at those periods when new adaptations are called for and special stress is apt to be felt. The great majority of epilepsies do commence in earliest life, and two-thirds occur before the twentieth year is reached, so that some error in the developmental life may be wisely suspected. Hitherto puberty has been the one stage recognised as requiring special adaptation, but our later knowledge of the developing psyche has taught us that mental struggles of various kinds take place normally in much earlier life. Clark would have it that the first stress period takes place in the first two years of life when the impulsive and automatic processes of life have to be adapted to; and the second one when the child is beginning to walk and talk. The third, he thinks, occurs between the ages of five and eight years, when school is commenced and the social self is widening. The fourth is that of puberty, which is not only stressful physiologically but the time when parental and home ties undergo a transformation and the individual tends to lead a more independent existence. As one may well imagine, this is especially the period in which epileptic reactions may commence in those so predisposed. Clark lays especial emphasis on his observation that the actual or potential epileptic child shows abnormal adaptive tendencies even in the first adjustment called for, and draws attention to the fact that such children imperfectly perform such simple acts as those of sucking and chewing, that they tend to be incoordinate and slow in learning new movements, and show an instinctive life full of unrest. Very soon there are indications of a poor development in judgment and will, with a lability of mood. These defects, with a strong individualism and hypersensitiveness, form the nucleus of the after-developing fully formed character of the idiopathic epileptic. The struggle continually goes on between the intense egocentric impulses and an unyielding environment, until pent up emotional energy finds an outlet in tantrums, rages, and lastly in definite epileptic attacks. Sudden intensive and stressful work or great adaptations to a new environment are especially apt to provoke *grand mal* attacks.

The want of understanding and sympathy that such reactions receive only tends to cause a greater and greater self-centredness, the outlook on life is narrowed and emotional and intellectual retardation begins. The emotional deterioration is detected in the speech, which fact has enabled Scripture through his experimental work to make recorded speech waves of special diagnostic significance. Strictly speaking, the epileptic does not lack emotional feeling, but it is wrongly directed. As he grows up his enlarged emotional power is turned back upon himself, often increasing his innate sensitiveness



and other egocentric habits of feeling and conduct. Later in the life of such epileptics the periodic attacks may be courted as a partial release of the extra tension of emotional feeling not otherwise normally directed. We find then that as greater and greater demands are made by the environment, the ability to adjust normally becomes increasingly difficult until the break occurs. If we realise the essential personal traits of the epileptic, it is not then difficult to understand with what satisfaction he retreats into a phantasy-world of his own, and how when the stress is great and potential high, reality must give way to lapses into unconsciousness. That this is the essential psychological interpretation of *petit mal* will be more clearly seen later when studies of the mental content are spoken of.

There comes a time when the struggle of adaptation is given up and all interest in the external world gradually ebbs. This, according to MacCurdy, is the explanation of the demential state which he thinks has no relation to the frequency or severity of the fits and which he says he can abort or often even cure by re-establishing interest in the environment and encouraging fresh adaptations. Clark says that many patients have a vague sense of the direction in which they must proceed in order to get well, and quotes a patient's remarks to this effect: "I can get well by doing the opposite of what I did in getting sick, and I want sleep and lots of it, and then I seem to want a sober, nice lot of fun, and I think in that way I will be able to release this deep down energy which doesn't find a proper outlet in any of the things that I have been accustomed to doing." It is certainly more than probable that there are many individuals in the community who from their defective psychic constitution are potentially epileptic and who abort such reactions by a continuous outflow of spontaneous interest. This point will be dealt with later when therapeutic suggestions are discussed.

Clark feels that it may be thought that too much stress is laid on the psychological settings in the causation and continuation of epilepsy and states that he recognises there are also physical counterparts to the mal-development which, if not portrayed in actual physical anomalies, show themselves in functional incompetence. This was touched upon when speaking of early defects in childhood. He therefore would also employ hydrotherapy for vasomotor disorders, adjust diets, take special measures to combat constipation and other bowel trouble, endeavour to overcome any muscular incoordination by graduated exercise, as well as train the intellectual and emotional spheres.

It is an interesting problem as to what constitutes the precipitating factor in a seizure, and though a trained observer may be able fairly definitely to predict the advent of one, the relation between cause and effect is by no means always patent. Even though an external and conscious cause of irritation is present, the real motivation is often unconscious, and a small upsetting episode may produce an attack while a more definite trauma may not be followed by one. The epileptic varies much daily in his capacity to face difficulties with equanimity. When he is spontaneously following out his own interests, he is contented and least likely to manifest any abnormal reactions; when he has to be stimulated at his work and routine he is more likely to do so; if neither condition exists he often leaves reality for the dream world, any arousal from which provokes irritability and renders him liable to attacks. Those who are in daily contact with epileptics and have care of them are fully cognizant of these facts on reflection; but how many study the problem

intelligently with a view to prophylaxis? If there be a dynamic element in the modification of the daily routine of the epileptic that tends to produce or inhibit seizures, the subject may be of prime therapeutic importance. It is, however, insisted on that the ordinary immediate stimulus to the fit in epileptics is not the irritation *per se*, but the repressive effort *not* to respond to the irritative stress which the epileptic feels; for such response, if fully allowed expression, would probably be of such violence that it would be too painful or humiliating. In time many epileptics acquire so supersensitive a mental state that even the most trivial accessions of repressions may precipitate an attack.

In order to demonstrate the frequent emotional fluctuations and how prodromal abnormal variations occur prior to a definite outbreak, Clark has devised a daily chart of epileptic reactions which in any individual case will illustrate what has been said above. Each day can be graphically recorded thereon, from below upwards, the factors of spontaneous interest, directed interest, lethargy, irritation, anger, elation, psychic phenomena, leading on to attacks of *petit mal* and finally of *grand mal*. A glance at such a chart completed for a month or two, when combined with a knowledge of the various adaptations required of the epileptic, gives one an interesting insight into the relations of cause and effect. It seems certain that any investigator sufficiently interested in the problem, would, by using such a method of analysing the patient's psychic life, find much confirmation of Clark's views. The many factors, which to the uninitiated physician may seem trivial but which to the hypersensitive and egocentric epileptic have a great significance, are thus seen in their right perspective. The inherent interest taken in some task, the amount of stimulation required to direct interest, the attitude of those who supervise, the receipt of letters, the visits of friends, the drudgery of long continued routine, are all thus seen to be modifying influences on the mental state and lead either away from or towards attacks, as the case may be. One can well understand the disastrous effects of harsh and unwise training treatment in producing the type of emotional disturbances which are frequently seen preceding attacks. In our mental hospitals how much time or trouble is taken to investigate into the origin of any recalcitrant behaviour of an epileptic? And yet so often even a superficial enquiry made by a sympathetic and understanding medical officer would reveal the source of irritation which in future might be obviated. One can so well see the disastrous effects of harsh and unwise training treatment in producing the type of emotional disturbances which are frequently seen preceding attacks. To quote two of Clark's cases in illustration.

(1) On the initiation of the observation period it was noted that the patient had been irritable and in an unstable mood. She laughed at little or nothing, became exhilarated and talked loudly when in the company of others. She found fault with trivial things. On going to bed she had a *grand mal* attack. She passed the following day without attacks, but in the evening had another major seizure following a period of irritation, anger, and finally elation. Next day she was irritable and angry, and refused to co-operate. The following day, however, there was an effort on her part to comply with the prescribed routines, but later in the day her interest lagged and she became irritable, angry, then elated, and later had another *grand mal* attack.

On the fifth she was irritated at everything and became very angry when directed to certain duties. But on the sixth she again made an effort at

readjustment and her interest for a time was spontaneous, but she soon tired and lapsed into a state of lethargy which was followed by the old irritable state. The following day another period of spontaneous interest was noted for a time, but the irritability soon reappeared and she had a *grand mal* attack.

The next three days the patient appeared happy and contented, going about her daily tasks without being irritated or annoyed, but on the eleventh she resented being told by her nurse that she must act in a certain way when in the company of the other guests, that she must not be talkative, etc. She became angry and irritable and remained in this mood for the rest of the day.

Following the reactions noted, there ensued a period of freedom from attack for over eighteen days. During this time the patient was active and cheerful, going about the daily routine in a happy state of mind. She devoted herself to her music and tennis and co-operated with her nurse in every way. About this time her mother took exception to certain articles of jewelry and finery that the patient wished to wear. Her mother took her to task rather severely and the patient retired to her room and cried for over an hour. She finally went to her mother and said she thought she saw the matter in the right light and would comply with her request. This episode with the mother took place at 10 in the morning and at 12.30 she had a typical *grand mal* attack.

(2) The patient, aet. 12, had been free from *grand mal* attacks for several weeks when the following incident occurred.

Boy-like, he had helped himself to some fruit which he was not permitted to indulge in. He was detected and censured. He immediately ceased his spontaneous interests and did poorly at directed ones. He was told he must apologise and restore the stolen fruit and that his comrades would be told of his misconduct. He made no effort toward handling the situation, was greatly dejected and experienced a keen mental anguish. He had an intense mental conflict with himself as to how he might get out of the situation rather than take the simple course of acknowledging his fault and making apologies, thus regaining the usual friendly relations with the people about him. He wished especially not to be shamed in the eyes of his boy companions. In this state of mind he went to bed. He moaned and tossed in his sleep, and on waking next morning he was listless and indifferent, refusing to follow the ordinary routine. All the forenoon he continued to be lethargic and indifferent, gaping and yawning, and at 11 o'clock had a *grand mal* attack. Immediately after the attack, although he made no effort at adjusting the difficulties, he appeared greatly relieved and went about his routine duties as if the whole matter had been quite removed. However, he was not amnesic for events that had occurred.

In these case-histories it is seen that the fit is largely a protective phenomenon, a reaction away from painful reality. It is, of course, too, a primitive method of reaction, a regression, and Clark believes that in the deepest regression the state sought or obtained in the unconscious is comparable to the extremes of infantile life. In confirmation of such ideas he has studied fragments of the mental content obtained during the milder types of seizures which show the depth of the regression which the epileptic takes. From this may perhaps be determined what bearing this content has upon the epileptic's former life and its defects. Attention is drawn to the fact that these sufferers make a poor emotional adjustment to their illness and attacks and many assume strange attitudes towards them. Not a few do not par-

ticularly dislike having them, unless there are special symptoms which entail mental suffering, some will actually desire attacks because of the release thereby of extra nervous tension, and a few have stated that they actually take pleasure in having seizures. A young adolescent who to all appearances seemed perfectly callous and unconcerned as to the outcome of his disorder, in a burst of annoyance made the frank statement: "I want these turns to come back after they are over. They give me a sense that there is still something missing, something that is not yet finished, something that I have not yet obtained. I always did enjoy them. They are a relief to me as well as being peaceful. I would like the severe one (*grand mal*) too, if it were not for the headache that I have afterwards." Such conscious expressions of pleasure at having attacks, though drawn from a large material, are rather unique in clinical experience, so that the analysis of the unconscious content which may be spontaneously produced or forced during slight seizures becomes the more important. Even the minor epileptic episodes of irritation which so often herald an approaching attack are capable of analysis.

Clark states that in epileptics one has to analyse conflicts more crass than those found in most neurotics. The epileptic has a simpler emotional pattern and his resistances are less, and more superficial, than the neurotic's. On the other hand, the roots of his conflicts are deeper and constitute such a defect as is not to be strictly psycho-analysed, so that only an intensive exploration of the conscious and foreconscious life is undertaken by him.

It must be explained what content Clark mainly refers to, and how he has been accustomed to deal with such material. The interest lies in the more or less completely disorientated state at the cessation of a convulsion when the patient assumes a vacuous pleased appearance as if he heard or remembered something. While in this state, if he does not voluntarily speak he should be gently encouraged to do so about his automatic acts. "What are you doing?" "What are you thinking about?" "What has happened?" and similar queries may be put to him, with perhaps some slight stimulation if he is too lethargic; but anything suggestive should be avoided. Usually some disjointed answer will be obtained and often in the optative mood, as "I am trying to," "I'd like too," or "I thought" so and so. If only a single word is received, the observer may repeat it and by tactful coaxing some amount of psychic content may be brought out. Even a few words may be of great value for subsequent free association, but often a series of cryptic phrases may be elicited. Practice is very helpful, as this stage before automatic repression sets in may only last a few seconds. In *petit mal* attacks any experienced person can get a mental content, but forcing one too much may unduly excite and fatigue. Whenever the same thing is said or the same action carried out in every post-epileptic automatic state, one may be certain that the patient's engrossment with such thoughts and acts has an intimate connection with his unconscious strivings. In *petit mal* there are modifications of the severity and different levels of unconscious impulses are tapped, but in the mildest the content is most compatible with conscious everyday desires. It is said that though with patience some material may be gained by breaking in upon the sleep of a *grand mal* case at the right time, the content is so archaic and crude that it is difficult to analyse and of little value. Once the patient shows annoyance at being questioned and shows resistance, one may be sure that conscious repression is again at work and nothing further is to be gained by enquiry.



Supposing we have already considered the remote and immediate stresses that aggravate and lead up to the individual epileptic reactions and also the special psychic make-up, it now remains to analyse by free association the words or ideas found in the content spoken of above. Clark's experience is that in the analysis of the epileptic little affective reaction is shown in contradistinction to the reaction of an hysteric, and that the attitude towards the conflict and resultant disease is probably closely related. In extreme cases this makes for a poor prognosis.

In his writings this observer presents the details of many cases showing various contents and their analyses. From such clinical material he comes to the conclusion that the mental content in epilepsy proves that the epileptic regresses from the unpleasant difficulties of life, and in the first stages of the fit the stress alone may be uncovered; whenever the patient reaches a deeper unconscious state, he gains the level of an easily recognisable sexual striving. A study of the mental content, both conscious and unconscious, demonstrates (1) the depth of the unconscious regression, (2) the special types of conflict which the epileptic has and the way he tries to solve them, (3) the specific type of primary defect in his endowment. In addition it has a therapeutic value in (4) furnishing a special point of analytic attack by simple explanatory talks, and (5) in showing more definitely the type of special education which should be adopted for each individual patient.

It remains now to see what therapeutic suggestions Clark has to bring forward as naturally deduced from his pathogenic views. In making his plea for a rational psychologic therapy he does not lose sight of the fact that sedatives and physical therapy are not without value when used in their proper sphere, and endocrine research must not be underrated.

The diagnosis, treatment and prognosis of idiopathic epilepsy should be properly made by taking into strict account the degree and kind of primary character endowment of the epileptic and its modifiability under a system of training, together with an analysis of the seizure phenomena. It follows from what has been said that the child who in its make-up shows itself to be a potential epileptic should have a special training from the start and by someone specially fitted for such a task. Tantrum episodes must be tactfully handled, and in sizing them up it must be judged when interest should be side-tracked into another channel and when they should be ignored, and there should always be a friendly review of all the circumstances that led up to them. Repressive measures must not be undertaken too early, and an alternate path must be at hand before the main issue is repressed at all, and instead the child should be taught to inhibit his own bad conduct if possible, and his attention should be directed elsewhere without coercion. The poverty of altruistic instincts renders any appeal to personal motives of little use until a much later period. Fatigue from simple mal-adaptations often soon appears and the bored or tired egoistic child has a tantrum not far distant, so that the problem of rest is not infrequently important. Less insistent demands must be made and for shorter periods of time than in normal children even in minor matters. The method by which the child secures its first adaptations to hunger and fatigue, and to social adjustments of work and play with its fellows, should be a guide for the proper after-training of the potentially epileptic child. A complete change of the make-up is not possible, but it can be modified, and a self-directive government should be the aim of a good system of nursery ethics.



Later the school training should be intensely individualistic and constantly elastic, for the epileptic requires novelty and a wide range of educational appeal. Though he may appear intellectually retarded, this is often due to a weakened attachment to reality. The maximum of school training should be concrete rather than abstract, and along the lines in which the patient exhibits the keenest interest and most distinct capabilities. The training should slowly accustom him to types of stress which he must get used to if he is later to make a proper adaptation to life. In future the epileptic must be helped to objectivate his interest in work, study and play.

In the frankly developed epileptic, by analysis of the mental content we may determine the defective make-up and its specific conflicts, bring to the patient's mind a better insight into his malady and thus cause him to see the sequence and consequence of his crude handling of life. Simple analytic talks are supplemental guides to more definite methods of training out the personality defect. It has been found that coincidental with a gradual disappearance of epileptic reactions as shown in the fits *per se*, there must be a corresponding increased capacity for work and other spontaneous living interests. It is to be noted that though many epileptics may be quite deteriorated, it is often possible to train back their once discarded mental interest and thus restore much of their emotional and mental dilapidation. In the more favourable cases great improvement in the convulsive symptoms occurs in many such individuals, and more or less permanent arrest of the disorder in not a few cases.

In the foregoing I have abstracted the essence of Clark's studies in idiopathic epilepsy which, however one may regard them otherwise, cannot but be looked upon as highly interesting, stimulating and suggestive. The great majority of our neurologists have been so trained to look upon the diseases which fall within their purview in the light only of neuronc mal-functioning, that they look askance at hypotheses which have a more or less purely psychological basis. Nevertheless Clark's work is materially confirmed by much that has been discovered by research into other nervous and mental reactions of an abnormal type. Few, therefore, who are not blinded by tradition and unconscious bias, will refuse to recognise the great value of these pathological ideas and the therapeutic possibilities they open up before us. When we reflect upon the enormous percentage of epileptics in the community and how unproductive and costly they are to society, any new light thrown on the problem should be highly welcome. There is no doubt but that we are greatly indebted to the prolonged and painstaking study by Pierce Clark of this abstruse and misunderstood disease.

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## REVIEWS.

*Treatment of the Neuroses.* By ERNEST JONES, M.D. (Lond.), M.R.C.P. (Lond.).  
London: Baillière, Tindall and Cox, 1920. pp. viii + 233.

In this book Dr Ernest Jones has undertaken to give a review of the principal methods of treatment of the neuroses, together with the minimum of psychopathology and symptomatology necessary to make this account intelligible. For the sake of convenience, he has devoted most of his space to a consideration of hysteria, discussing the pathology and treatment of this disease in great detail, and using it to illustrate the relative merits of different schools of thought. In this way he has avoided unnecessary repetitions, and has also conformed to the historical situation, for hysteria has been more intensely studied and more extensively written about during the last half century than all the other neuroses and psychoneuroses put together. But as a leading exponent of the Freudian school, he might perhaps have been expected to devote a larger amount of space to the consideration of what he calls 'obsessional neurosis,' since the superiority of psychoanalysis over other forms of psychotherapy is so very apparent in this disease. Indeed, no other method is of any permanent value here, and practitioners are therefore in special need of instruction as regards the ultimate psychoanalytic solution of such cases (which are very numerous) and the main features of the technique required.

Dr Jones follows Freud in his classification of the neuroses and psychoneuroses, and has set them out in a concise but masterly way. He dismisses the Janet concept of 'psychasthenia,' since it covers a group of diseases really heterogeneous, and he treats the neuroses under the headings: Conversion-Hysteria, Anxiety-Hysteria, Anxiety-Neurosis, Neurasthenia, Obsessional Neurosis, Hypochondria and Fixation-Hysteria, and finally the Traumatic Neuroses. He leaves a very clear view in the reader's mind of the nature of these diseases and their inter-relations. He draws balanced and instructive contrasts, such as *e.g.* that between neurasthenia and anxiety neurosis. "In the former the apparent [sexual] excitations are deficient, and the efferent discharge excessive; in the latter the afferent excitations are excessive, and the efferent discharge deficient" (p. 187). Again, comparing conversion- and anxiety-hysteria, he reminds us of important contrasts: "It is true that in both there may be physical symptoms, paralysis being an instance in the one case and palpitation in the other, but these are quite dissimilar in kind. In conversion-hysteria the physical symptom is the external symbol of a group of ideas, whereas in anxiety-hysteria it is merely the expression, the necessary physiological accompaniment, of a given emotion; in the former case the symptom has a precise mental meaning, in the latter it has none" (p. 177).

There is an instructive chapter on the Prophylaxis of the Neuroses, of special significance for educationists.

The methods of suggestion and re-education are discussed in some detail, and on the whole quite fairly, although it is plain throughout that the discussion is meant to lead up to a superseding of them by the psychoanalytic method of Freud.

When the author says that the main part of the beneficial result achieved by persuasion is due to the suggestive influence of the physician, he is not likely to meet with universal assent from those who practise this method. His enthusiasm for the elaborate methods of Freud perhaps tends to make him underestimate the extent to which non-Freudians dig below the surface in their attempt to explain conscious symptoms by reference to factors (emotional as well as intellectual) not themselves in clear consciousness. It is only when the unwarranted assumption that "the aberrant mental processes that have to be corrected are [believed by the non-Freudians to be] conscious ones" is made, that the Freudian criticism is effective. The belief in unconscious psychical process did not originate with Freud, and psychological determinism is at least as old as Spinoza. It was no doubt lack of space that prevented Dr Jones from giving a more adequate account of methods of analysis, re-association and re-education used so successfully by many British psychotherapists during the last few years. In the short chapter (seven pages) on "Traumatic Neuroses, including War Shock," one finds statements that are rather surprising. For example, reference is made (p. 204) to "the small percentage of the total combatants thus affected" [with war-shock]. As a matter of fact, one-seventh of all the cases discharged from the British Army as permanently unfit, from whatever cause, were of this nature. And these were only a small proportion of the total number affected. The average returns to duty of shell-shock cases in the field were 70 %, and this percentage rose as high as 90 % or more at the time of a push. So that less than 30 % of all the cases reached the base, and less still reached England. Dr Jones writes: "The source of the morbid fear present in most cases of war neurosis appears to be repressed narcissism, and it is even possible to predict from this knowledge which men will be more liable to suffer from war shock or any similar trauma" (p. 207). Medical officers who saw the thousands of brave men who got over their shell-shock while in the field, and never went down the line at all, will read this sentence with a smile; and when they turn the page to read that "there is little point in going over now the ways in which human material was recklessly wasted through the lack of knowledge of clinical psychology so widely displayed at that time" (p. 208) they may remark on the lack of interest shown in this book for the work done on the greatly preponderating amount of that human material, which could only be seen in the armies in the field and did not reach England at all.

There seems to be some confusion of thought in the discussion of 'transference' (*Uebertragung*) on pp. 136-138. Dr Jones first says (p. 136) that this affective *rapprochement* between patient and physician constitutes "the essential basis of suggestion." On p. 137 he writes: "Suggestion is thus the main hindrance to treatment by psychoanalysis, and this is one of the grounds, amongst others, why the psychoanalytic method cannot be combined with treatment by means of suggestion or hypnotism, as Forel and others have unthinkingly advocated; the two systems are fundamentally opposed in their aims." And yet, four lines lower, he writes, "It is only *via* these transferences that the analysis can proceed, beyond at least the earliest stages; it is only by making the old buried motives and emotions current and actual in the transference situation that one can lead the patient to a complete realisation and assimilation of them." So transference, or "the essential basis of suggestion," is needed for a successful analysis, after all! And if we turn to the Master, we read these words: "Wenn der Kranke den Normalkonflikt mit den



Widerständen durchzukämpfen hat, die wir ihm in der Analyse aufgedeckt haben, so bedarf er eines mächtigen Antriebes, der die Entscheidung in dem von uns gewünschten, zur Genesung führenden Sinne beeinflusst. Sonst könnte es geschehen, dass er sich für die Wiederholung des früheren Ausganges entscheidet und das ins Bewusstsein Gehobene wieder in die Verdrängung gleiten lässt. Den Ausschlag in diesem Kampfe gibt dann nicht seine intellektuelle Einsicht—die ist weder stark noch frei genug für solche Leistung—, sondern einzig sein Verhältnis zum Arzt" (S. Freud, *Vorlesungen zur Einführung in die Psychoanalyse*, Zweite Auflage, 1918, S. 522).

[*Translation*: "If the patient is to fight through the normal conflict against the resistances, which we have discovered for him in the analysis, he is in need of a powerful motive which influences the decision in the sense, wished by us, leading to recovery. Otherwise it could happen that he might decide for the repetition of the earlier result, and allow that which had been raised into consciousness to slip back again into a state of repression. The decision in this fight is given, then, not by his intellectual insight—which is neither strong enough nor free enough for such an accomplishment—but solely by his relationship to the physician."] It is true that such transference or affective *rapport* has itself to be 'resolved' later on in the analysis, but this fact does not destroy its significance as an essential factor in cure by psychoanalysis. Indeed, Freud distinguishes the curable hysteria and obsession neurosis, which he calls *Uebertragungsneurosen*, from the incurable dementia praecox and paranoia, which he calls *Narzisstische Neurosen* or paraphrenia, with reference to this very factor of positive transference.

These few criticisms apart, the book can be strongly recommended as a really excellent introductory textbook on psychotherapy. It is clearly written, and has a consistent line of argument running through it from beginning to end which makes it very easy to read. Its scope has not admitted of inclusion of illustrative examples, and its whole-hearted adherence to one school of thought prevents it from being completely representative of modern psychotherapy. As an elementary statement of the Freudian position it is of great value.

WILLIAM BROWN.

*Psychoneuroses of War and Peace.* By MILLAIS CULPIN, M.D., F.R.C.S.  
Cambridge University Press.

Dr Culpin has produced a very readable and interesting book. It is perhaps most interesting in the evidence it gives of the writer's own development towards full acceptance of Freud's conception of the unconscious. Dr Culpin admits in his preface that his views have not yet reached finality, and to those who have perhaps travelled a little further along the difficult road towards psychological understanding it is evident that he has still some Rubicons to cross at which many have hesitated or still do so.

The writer has gained his experience and formulated his views under the difficult conditions of a special Neurological War Hospital, and no one who has not experienced the psychological situation in these hospitals can estimate how hard it was to appraise rightly the value of the different therapeutic procedures or the meaning of the psychological mechanisms involved. In the opinion of the present reviewer the principal limitations of Dr Culpin's theoretical exposition lies in the fact that he makes no reference to the



mechanism of Transference in the Freudian sense, and it may be noted in passing that throughout the book the term 'Transference of Affect' is used instead of the more usual 'Displacement of Affect.' It is surely getting more and more certain that the most important mechanism involved in all therapeutic procedure, whether Hypnosis, or Abreaction, or Analysis, is the Transference of Affect from the fixations in the unconscious of the patient to the person of the physician. In no cases was Transference so easily obtained as in the peculiar psychological situation of a Military Hospital in war time, and, unfortunately, it was very frequently under-estimated. The under valuation of this factor has sometimes vitiated, not the value of the work done, but the subsequent estimate of the comparative value of therapeutic procedures.

In using Psychasthenia in his classification of cases as well as in his statement that some cases are better understood if pictured as due to dissociation and some as due to repression, Dr Culpin is evidently still halting a little between the conceptions of Janet and Freud, although evidently from his method of treatment and judgment of results, he is finding Janet's attractive conceptions increasingly sterile in their power to evolve a satisfactory Therapy.

In the chapter on Phobias and Obsessions, it is interesting to note that no case is mentioned that could probably be classified as a true obsessional or compulsion neurosis. Dr Culpin does not even include compulsion neurosis in his classification of cases. This is in accordance with the experience of others that compulsion neuroses were very infrequent in War Neurological Hospitals, and were even, from their psychological make-up, not particularly unfitted for the stress of active service.

The greater part of the book is devoted to the description of cases, and although there may be much to criticise, it is evidently the work of one who has brought mature judgment and an open mind to the study of many difficult and still unsolved problems.

M. B. WRIGHT

## ABSTRACT.

*Internationale Zeitschrift für Psycho-Analyse.* 1920. Part I.

The *Zeitschrift* is the official organ of the International Psycho-Analytical Association and was founded as such in January, 1913, by Professor Freud. It appears quarterly, and its official function will henceforth be shared by the *International Journal of Psycho-Analysis*, a publication in English, of which the first number appeared in July of this year.

Freud opens the first number of the *Zeitschrift* for 1920 with a brilliant essay "On the Psycho-Genesis of a case of Female Homosexuality." A translation of this article will appear in the second number of the *Journal* just mentioned and will therefore not be noticed at great length here. It may be said, though, that apart from the scientific value of the matter, the fascination of any work of Freud's in the original German is far greater than translations disclose. The simplicity and restraint of the style and presentment stimulate and tantalize the reader; his writings are works of art in a new field. For the manner is not to be dissociated from the matter, nor from the language; he excels in what he is, a writer on psychology, the mind and motives of humanity; his lucidity and insight are unique; but his personality and sympathy, somewhat patriarchal in their simplicity and dignity, give his writings the spirit of the best German traditions. This quality is not easily conveyed in an English rendering, where it may even appear as an inartistic peculiarity. In this essay the attraction of the exposition is added to by an unusual subject; homosexuality in women has been, as he remarks without explaining the circumstance, ignored by public opinion and the law, and even neglected by psycho-analytic writers.

The patient in the case was a well-bred girl of 18, brought to Freud by her parents on account of her infatuated pursuit of a woman of doubtful reputation, which no efforts of theirs were able to cure or prevent. There were no neurotic symptoms; it was a case of perversion; the girl had evolved an attitude to life in which all feminine interests (such as men and children) were regarded with indifference or contempt; in the passion for the loved woman which absorbed her she herself played the part of an adoring man. Such was the superficial aspect of things: Freud's account of the analysis, undertaken experimentally by him for reasons which he gives, unfolds an extraordinary tale, which on close attention is found to have no link missing in its logical sequence. The main psychological motive behind the abnormal state of mind turns out to be the girl's unconscious desire for revenge on her father, closely connected with unconscious envy of a child which was born to her mother in the first year or so after the girl had reached puberty. Underneath the homosexuality lay the buried heterosexuality. The connection and inter-relation between the wish to become a mother herself (her feminine sexuality), love and hate of the father, and hate and love of the mother, are traced with absorbing clearness to their final development—a revulsion from them all and an exclusive concentration of all sexual feeling into a masculine form, latent in the inborn bisexuality. Such a conclusion is undeniably startling; that beneath the surface the adored woman should be compara-

tively unimportant, that the unsatisfied desire for a child and love of the father should be the main cause of an attitude excluding men and children are contradictions which only psycho-analysis could have revealed. Yet here is an explanation so intelligible, so characteristic of human behaviour, that, beside it, shadowy conceptions like the 'third sex' theory fade into meaningless insignificance. "The grapes are sour" is one of the oldest *cris du cœur*, one of the commonest and simplest reactions. The vehement rejection and repudiation of the unattainable, of femininity and the mother-*rôle*, is a consequence and a measure of the original longing for just that form of sexual satisfaction. Revenge follows upon disappointment—men shall be hated and ignored; more, their rights shall be taken from them, their place shall be usurped, women shall love women, and a world without men or children shall exist. Here are the mainsprings of female homosexuality, reversing the same order of things, the same cry as in the male. As psycho-analysis has found in the case of men, sexual inversion rests on the basis of a strong infantile Oedipus-complex, a fixation on the parent of the opposite sex and subsequent identification with that parent; whether the parallelism between the mechanisms in the two sexes goes further than the starting-point is not yet clear.

Freud's doubts as to the success of analysis in this case on general grounds were the more justified owing to the particular unconscious forces at work beneath the surface; for, in the course of the analysis, he naturally became a father-substitute, so that the transference took a purely negative form, supplying less than no incentive to aid in overcoming resistances. For this reason he broke off the attempt and advised that the case should be handed over to a woman analyst.

Freud takes the opportunity provided by this case of discussing the general problem of homosexuality, referring to current and popular theories as to its nature and origin, and the question of its constitutional or acquired character; he points out the important distinction between the inverted choice of object and an inverted attitude in the subject, and the relation between the two. He goes on to deal with the problem of physical hermaphroditism and the presence of secondary sexual characteristics of the opposite sex and the relation of this to psychical inversion; finally pointing out that psycho-analysis is not qualified to solve the problem of homosexuality, which in the last resort depends upon a biological definition of the terms 'masculine' and 'feminine.' He concludes by alluding to operative experiments on the genital organs by Steinach, of Vienna.

In this essay Freud deals with several points of great psycho-analytical interest; referring particularly to the mechanism of identification of the self with the loved object after repression, a most important matter, responsible for much of the complicated inconsistency of human behaviour; he mentions also the extremely common mechanism of 'backing-out,' by which a final and life-long abnegation of a particular interest or *rôle* in life (for example, an interest in music) may be due to an early, and subsequently repressed, rivalry with another in regard to it, the repression taking the form of yielding to the rival, with a total renunciation of the *rôle* or interest thenceforth. The subject of the essay shows this trait, the girl having renounced a feminine *rôle* for ever in consequence of the repression of the wish to supplant her mother in that capacity. He also throws light on a practical point in analytic treatment, arising in the phenomenon of 'propitiatory' dreams (produced in order to propitiate the analyst and deceive him as to the resistances),

which are calculated to rouse feelings of bewilderment and incapacity in the inexperienced.

Like the 'Dora' case<sup>1</sup> and the 'White Wolves' case<sup>2</sup>, Freud's two other casuistic studies, the essay is a little masterpiece, more absorbing than any fiction, with its picture of the young girl held in the vice of the tragic and inexorable forces within her, told with the calm of 'tout comprendre' (although we think the affront to the male sex has not left the analyst untouched—and perhaps here, in the combination of intuitive sensitiveness with objective insight, lies the secret of Freud's genius), containing so much truth, such wisdom, that, having read it, those who care for truth will feel as though scales had fallen from their eyes.

Dr H. Nunberg has an article in this number "On the Catatonic Seizure," which is a contribution to the study of the psychoses in the light of psycho-analysis. He describes an interesting case which was more open to observation than many, and sets out in great detail the results obtained. Freud has not published anything dealing exclusively with this subject, but his views are indicated to some extent in his recent work<sup>3</sup> and Dr Nunberg's case confirms his conclusions.

The comparatively familiar theory, which may be regarded as now well-established, that the psychoses are related to a disturbance of the development from the primary narcissistic stage on to the plane of Object-love, rendering the subject more or less incapable of investing with his *Libido* any object (person) in the world outside himself, and causing an accumulation of *Libido* involving the self (Ego-tendencies) is very clearly illustrated by this case. The patient was a man of 32 who had succeeded fairly well in life until the withdrawal from the outer world had proceeded too far. Homosexual tendencies, pointing to a narcissistic object-choice had shown themselves and he had evidently endeavoured to defend himself against this by various means, partly intellectual, and by an interest in sport, physical training, etc., by which he worked off some of his hypochondriacal pre-occupation with his health and himself generally. Clearly also as a defence, he had been living for two or three years with an unmarried sister, and the failure of this as a protective measure is shown by the ensuing identification of himself with her, which came out in the delusion. The outbreak of the catatonic attack and his removal to an asylum followed upon an attempt to violate her, on which a further regression of *Libido* took place and contact with the outer world was practically lost, with a resulting confusion, incapacity to distinguish between internal and external stimuli and consequent "disintegration of the self." The extent to which the self had absorbed the *Libido* was shown in numerous ways, particularly in the delusion of self-importance, of being or becoming the saviour of the world, and in the loss of capacity to distinguish between self and outer world, so that "he was the only living thing on the earth and all the life of the earth flowed through him," this being the kernel of the delusion of transformations and of the fear of being himself transformed into an animal or a worm or excrement. In the attack the patient was addicted to an interminable preaching of high-flown sermons about the

<sup>1</sup> *Bruch-stück einer Hysterie-analyse.*

<sup>2</sup> *Aus der Geschichte einer Infantilen Neurose.*

<sup>3</sup> *Vorlesungen zur Einführung in die Psycho-analyse.*  
*Neurosenlehre. IV<sup>te</sup> Folge.*



regeneration of the world (himself) through sacrifice and abstinence, both of these last ideas being closely connected with his own narcissistic conflict. Dr Nunberg explains this preaching as a kind of 'secondary elaboration' of an effort still being made to retain a relation with the outer world.

In contrast to this, the patient's behaviour showed a complete abandonment of all aesthetic and ethical inhibitions and expressed in an undisguised manner the seeking for pleasure in self-satisfaction and in love of the self (the subject's own body and its functions and sensations), on the assumption of a self-sufficiency, omnipotence, etc., characteristic only of the primary narcissism. Even here, though, Dr Nunberg shows that the conflict persists and an attempt to resist the withdrawal of *Libido* to the self is still being made; the effort to retain objects has not been relinquished, for on the basis of the identification of world (objects) with self, objects are being sought within the self. In this way, following on the "disintegration of the Ego," the various erotogenic organs and parts of the body come to be regarded as objects outside the self and invested with *Libido* as such. The principle of compromise in symptom-formation therefore holds good here as in the neuroses. The withdrawal of *Libido* into the self is resisted in two ways, by incorporating the objects of the outer world into the self (world-regeneration idea) and by projecting parts of the self (organs) as objects into the outer world.

A further corroboration of Freud's views is to be found in the evidence this case brings of the phenomenon of 'organ-speech'; it appears that on this regressive level of 'organ-pleasure' the sensations and functions of the bodily organs are employed as a means of self-expression in the place of speech and intellectual processes. This primordial disposition may contain the germ of hysterical symptom-formation; at any rate Dr Nunberg compares this neurosis with 'schizophrenia,' the difference between the two being that in hysteria the *Libido* is still unconsciously attached to real objects in the outer world, whereas in the latter it has instead regressively invested the bodily organs of the subject.

Again exemplifying a point of Freud's, the case shows how the libidinous affect was seeking a revival and repetition of a significant early experience. The attack was a representation of the patient's own birth, the first affective experience. (Ideas of regeneration, rebirth, identification with mother, etc.)

It is not possible here to do more than summarise in this way some of the points dealt with by Dr Nunberg. The obscurity of the subject and the unfamiliarity of the conceptions discussed make the article a difficult one, nevertheless such attempts to develop and illustrate new lines of research are most valuable to the student and repay close attention.

There follows the first part of an interesting study, by Dr M. J. Eisler, entitled "An Unconscious Pregnancy-fantasy in a Man under the Guise of Traumatic Hysteria." This is concluded in the next number and will be noticed with that.

Dr Karl Abraham contributes a short article on "The Narcissistic Valuation of Excretory-processes in Dream and Neurosis." The primitive attitude (observed in children, the insane, etc.), so characteristic of the Unconscious, which attributes to the excretions (products) the highest degree of value and importance has been frequently referred to in the literature of psycho-analysis. It must have been noted by all analysts that a similar degree of over-estima-



tion is often attached to the excretory-processes, the act of excretion, by the attribution to these functions of power to create or destroy. A woman's dream illustrates the sadistic wish to destroy her entire family (parents and brother) by faeces, 'wind' and 'water.' A boy of eleven, who identified himself with his mother after observation of parental coitus, and who suffered from neurotic disturbances of the defaecatory function, dreamt that he was pressing out the Universe from his anus. This dream is compared with the various myths of creation and Dr Abraham shows that the version, God's "Let there be!" followed upon a more primitive conception, in which God breathed the breath of life into a mass of earth (excrement), the idea of omnipotence of thought (Let there be!) being a later development from the primordial idea of the omnipotence of excretory-processes. As regards the connection of sadism with these functions, Dr Abraham points out that in children an access of rage produces physical effects quite similar to those of an act of defaecation, and he relates to this the fact that with neurotics an explosive action of the bowels is a frequent substitute for an explosion of rage.

Dr J. H. W. van Ophuijsen, writing on "The Feeling of being Followed," refers to the delusions of persecution in paranoia, and also to the similar morbid fears of neurotics, intolerance of being followed upstairs or in the street, dreams of being pursued, etc.

According to Dr van Ophuijsen's experience, this symptom is derived from the anal-complex and he suggests that the paranoiac delusion may be traced to the same source. He gives illustrations from the dreams of three male patients of being pursued, threatened or attacked, which, on analysis, clearly show that the feeling of being followed can result from a projection of the internal sensations caused by the faeces in the anal canal. In all the cases there was also some indication of a connection between the 'pursuer' and the father or paternal genital organ.

Besides four interesting reviews of non-analytical books dealing with biology and physiology from which it appears that some support on the physical side may be forthcoming of Freud's theory of infantile psycho-sexuality, three smaller contributions are included. Dr Paul Federn discusses an inhibition-dream from which the patient awoke with the typical sensation of being unable to make any movement, and shows how this can be provoked by internal physical sensations which are interpreted by the mind as external stimuli, pointing out the difference between this and the typical inhibition-dream in which the inability to move arises from an intra-psychical conflict. Dr Rudolf Schneider makes a tentative criticism of Freud's theory that nothing can occur to the mind 'by chance,' by describing some 'analyses' of numbers not selected by the subject but presented to him, which showed that precisely the same type of intimate personal associations could be arrived at from a number given as from one spontaneously presenting itself. He claims from this that the fact that the latter can always be analysed is not, therefore, proof of the determination of psychical processes, and that other proof is required to support the theory.

There follows a short note (presumably by Freud) on a passage in Havelock Ellis's book, *The Philosophy of Conflict*, in which he expresses the view that Freud's work in psycho-analysis is to be regarded as an artistic creation rather than as scientific truth. This is here emphatically denied, and the

writer goes on to consider the question of priority in the discovery of the free-association method, which Havelock Ellis raises. It is then stated that Professor Freud, at the age of 14, possessed a book, written in 1823, by one L. Börne, called *How to become an Original Writer in Three Days' Time*, which impressed him very deeply, although he had since forgotten most of it. It was recently brought to his notice that a passage in it describes precisely the method employed in free-association: "Write down, for three whole days together, everything as it comes into your head...that is the way to become an original writer." It is quite possible, therefore, that this idea had lain dormant in Professor Freud's mind for many years, only to be made use of by him later in his treatment of nervous disorders. But of all those to whom the idea of free-association had occurred, and they must be many, it was left for Freud to employ it in such a way as to provide the scientist with a new instrument in the search for truth, and mankind with a new endowment in the struggle for life.

JOAN RIVIERE.

## NOTES ON RECENT PERIODICALS.

*The International Journal of Psycho-Analysis*, vol. I, part I, 1920.

This is the first number of a new international publication devoted to psycho-analysis. Directed by Professor Freud and edited provisionally by Dr Ernest Jones, it is an official organ of the International Psycho-Analytical Association, ranking equally with the *Internationale Zeitschrift für Psycho-Analyse*. Its promoters have felt that the need for such a journal published in English has become urgent owing to the interest in psycho-analysis now taken by many readers who are unfamiliar with the German language. It will deal with the subject of psycho-analysis and kindred studies, but will not attempt to cover the whole field of psychopathology. On the other hand, it will go beyond the clinical sphere and will include the applications of psycho-analysis to literature, education, mythology, philology, sociology, anthropology, and so on.

The first number opens with an appreciative obituary notice, by Dr Ernest Jones, of the late Dr James Jackson Putnam, the well known American neurologist, whose acceptance of the doctrines of psycho-analysis had considerable influence in directing the attention of American and English students to the serious study of the subject.

Professor Freud contributes an article on "One of the difficulties of Psycho-Analysis." He traces very briefly the history of his *Libido Theory* of the neuroses and points out that although in the course of individual human development the original narcissistic distribution of the *Libido* gives place to object-love, yet not all of the *Libido* passes over from the Ego to the objects of the outer world. In all men there is a certain amount of narcissism or self-love. He then goes on to show how man's self-love has been three times badly wounded by the results of scientific research.

The first occasion was when, with the acceptance of the Copernican theory, it had to be recognised that man's dwelling place, the earth, was not, as he had fondly supposed, the centre of the universe.

The second was when, with acceptance of the doctrine of evolution it became plain that the gulf between the brute and the human was not so great or so fundamental as man had thought. The demonstration of his kinship with the animal world was the second blow to his self-love.

The third blow was inflicted by the psycho-analysts when they declared to be mistaken man's feeling that he is master of his own soul, that consciousness gives the Ego news of all important occurrences in the working of the mind, and that his will, guided by these reports, can keep his instinctive impulses under due control. Study of the neuroses by psycho-analysis showed, on the contrary, that much of importance, which is not reported to consciousness, goes on in the mind, and that the life of the sexual impulses cannot be wholly restrained.

The demonstration of the unconsciousness of mental life and of the psychological significance of sexuality was the third blow to human narcissism. "No wonder, therefore, that the Ego does not favour Psycho-Analysis, and obstinately refuses to believe in it."

Mr J. C. Flügel contributes an interesting study "On the Character and Married Life of Henry VIII," in which he applies psycho-analytic findings to historical material. He considers that the "behaviour of individuals long since dead can be satisfactorily accounted for on psycho-analytic theories (and perhaps in no other way)," and that this affords "very valuable corroboration of the utility and validity of the psycho-analytic method."

The first of a series of elementary didactic articles on psycho-analysis is contributed by Dr Douglas Bryan under the title, "Freud's Psychology." It gives a clear and simple account of Freud's views on the nature and functions of the Conscious, the Pre-conscious, and the Unconscious.

A very full review of the "Recent Psycho-Analytical Literature in English" is given by Dr Stanford Read. No less than 346 original contributions and 30 translations are tabulated.

The *Journal* also contains the Reports of the International Psycho-Analytical Association and the history of the British Psycho-Analytical Society with a list of members and associate-members.

*The Journal of Neurology and Psychopathology*, Vol. I, No. 1. May, 1920.

This is another first number of a new English journal. As indicated in its title, Neurology would seem to be its main interest; but the contents of the first number are fairly evenly divided between the two departments. The chief contribution on the psychological side is "A Note on Suggestion," by W. McDougall. In this paper Dr MacDougall defends his well known definition of suggestion against some criticisms made by Dr Bernard Hart in a paper read before the Royal Society of Medicine, and in turn criticises Hart's contention that all the processes ascribed to suggestion are in reality examples of 'complex-thinking.' He also takes exception to Hart's use of the term 'complex' to denote any group of ideas with strong affect, whether dissociated or not, and urges that the term should be reserved for sentiments of a pathological character,—thus adhering to Jung's usage when he introduced the word into psychopathology.

McDougall agrees with Hart that, if our knowledge is to be advanced, we require to know what is the particular emotional factor involved in suggestion, and he submits that this requirement is fulfilled in the view put forward by him in his *Social Psychology*, namely, that the conative force at work in the person accepting a 'suggestion' is commonly the instinct of submission. He brings forward a new consideration in support of this view. This is based on the observation that some physicians find only hysterical persons to be hypnotizable, and these only so long as they are neurotic; when they are cured they can no longer be hypnotized and are insuggestible. McDougall thinks that those who have this experience—which is unknown to many hypnotists—must adopt what he calls, without meaning to be offensive, the domineering attitude. This tends to rouse the self-assertive instinct of a normal person, thus nullifying the effects of the instinct of submission or preventing it from coming into play.

McDougall's only concession to his critics is to amend his original definition, so that it now reads, "Suggestion is a process of communication resulting in the acceptance with conviction of the communicated proposition *independently of the subject's appreciation* of any logically adequate grounds for its acceptance." The substitution of the words in italics for the original phrase, "in the absence of," adds greatly to the accuracy of the definition.

*The Psychoanalytic Review*, July 1920, Vol. VII, No. 3.

The July number of this well known American publication contains an article by Dr W. H. R. Rivers on "Freud's Concept of the Censorship." Rivers finds it difficult to accept a concept which involves the working within the unconscious of an agency so wholly in the pattern of the conscious as he considers to be the case with Freud's censorship. Instead of finding a sociological parallel to this unconscious activity he thinks we ought to look for one in the physiological sphere. If we assume an organisation of unconscious experience similar to the organisation of the nervous system in different levels, we should have a number of levels in which experience belonging to adult life would occupy a position higher than that taken by the experience of youth, and this again would stand above the experience of childhood and infancy. Each level would preserve in its mode of action the characteristics of the mentality in which it had its origin. The higher levels would control the lower levels and prevent the manifestation of their lower modes of expression. On this view the distortion of dreams is not the result of censorship, but is merely the natural mode of expression at the infantile level becoming manifest when the control of the higher levels is removed in sleep. This interpretation involves the denial of the function of the dream as the guardian of sleep. It may have such a function, but, if so, it is a secondary aspect of the process.

Rivers thinks the concept of a censorship as accounting for the 'distortion' in the symptoms of hysteria is even less appropriate than in the case of the dream. The production of hysterical symptoms by suggestion is an indication of the primi-



tive character of the reaction, for susceptibility to suggestion is to be connected with the gregariousness of man in the early stages of the development of human culture. Hysteria is the coming into activity of an early form of reaction to a dangerous or difficult situation. "The protection against the danger or difficulty so provided is the direct consequence of the early form of reaction, and the concept of a censorship making it necessary that manifestations shall take this form is artificial and unnecessary."

Rivers applies the same principle to the explanation of lapses of control in the more purely neurological sphere, such as false strokes in work or play, and spasmodic movements having a more or less purposeful character ('tics'). He concludes his paper by drawing attention to the existence, in both civilized and savage culture, of some parallels to the process which he proposes to substitute for Freud's censorship.

Dr Edward W. Lazell contributes a paper on "Psychology of War and Schizophrenia," in which he combats the opinion arrived at by those who think that the experience of the war has shown the Freudian doctrine of the psycho-sexual genesis of the neuroses and psychoses to be erroneous. He admits the part played by the instincts of self-preservation and the fear of death, but he adduces the great mass of evidence resulting from the study of schizophrenia to show that the fear of death is an "elaboration of the sexual instinct." He summarises Freud's views on the psychic mechanisms of primitive man with reference to death, killing, sacrifice, remorse, and the development of taboo, and points out how they may be applied to the interpretation of the delusions of schizophrenia. He says it is remarkable that in the delusions of war schizophrenics "there is an almost complete absence of colouring matter applying to the war. In fact they show the same delusional content and symptoms as those schizophrenics who have not been in the war at all. In other words, the conflict is a strictly personal one, the sexual nature of which is clearly apparent in the stories of the patients themselves."

Dr Mary K. Isham discusses "The Paraphrenic's Inaccessibility," and there is a translation of an article by Honorio F. Delgado on "Psychological Psychiatry." This latter is expository and shows Delgado to be a follower of the post-psychanalytic School of Jung and Silberer.

Abstracts from psycho-analytic journals and of books on psycho-analysis have been a special feature of *The Psychoanalytic Review* from its inception, and the July number contains abstracts of *Imago*, III. No. 4, of several books, and of some articles from psychological and medical journals.

T. W. M.

#### PROCEEDINGS OF THE MEDICAL SECTION OF THE BRITISH PSYCHOLOGICAL SOCIETY

The following is a list of the meetings of the Medical Section since its formation:

May 15, 1919.	Psychology and Medicine, by W. H. R. RIVERS.
June 11, 1919.	The Generation and control of Emotion, by A. E. CARVER.
October 29, 1919.	Suggestion and Suggestibility, by E. PRIDEAUX.
November 26, 1919.	The Psychology of Child Education, by MARIA MONTESSORI. (Joint Meeting with the Educational Section.)
December 17, 1919.	Some Physical Signs of Unconscious Wishes, by W. H. B. STODDART.
January 21, 1920.	Recent Advances in Psycho-Analysis, by ERNEST JONES.
February 18, 1920.	The Revival of Emotional Memories, and its therapeutic value, by WILLIAM BROWN, C. S. MYERS and W. McDougall.
April 28, 1920.	Psychological Adaptation, by CONSTANCE LONG.
May 12, 1920.	Left-handedness and Mental Deficiency, by HUGH GORDON. (Joint Meeting with the Educational Section.)
June 23, 1920.	An Outline of the Idea of Re-birth in Dreams, by MAURICE NICOLL.



DISORDERS OF SYMBOLIC THINKING DUE TO  
LOCAL LESIONS OF THE BRAIN.

BY R. MOURGUE.

Nous admettons ici comme un résultat acquis de la pensée scientifique contemporaine que les troubles de l'expression verbale de la pensée, les seuls que nous désirions envisager ici, auxquels, pour suivre la tradition, nous conservons le terme général d'*aphasie*, ne peuvent nullement être ramenés à des pertes d'images en relation avec des lésions de prétendus centres étroitement spécialisés. Considérant ce point de vue de *psychologie structurale* comme définitivement périmé, nous en tiendrons au point de vue de la *psychologie fonctionnelle* tel qu'il a été établi par les travaux, issus de points de vue différents, mais concordants dans leurs résultats généraux de Hughlings Jackson, Bergson, P. Marie, Von Monakow, A. Pick, etc. M. Head vous a exprimé son point de vue sur la question<sup>1</sup>; il n'y a rien à ajouter à sa démonstration si rigoureuse.

En admettant donc ce point de vue, qui tend à s'imposer de plus en plus, nous nous demanderons en faisant seulement appel à l'observation la plus immédiate, et, lorsque cela sera possible, à l'auto-observation vécue des malades, s'il est vrai, comme on l'a dit, que les troubles de l'expression verbale dus à des lésions cérébrales soient les plus propres à nous faire entrevoir la nature de la pensée. Dans cette recherche nous croyons qu'il faut se placer résolument sur le terrain de la *psychologie fonctionnelle*, comme l'avait fait Hughlings Jackson, qui, ici encore, fut un grand précurseur et devança l'application, si à la mode aujourd'hui, en Allemagne, de la *psychologie de la pensée* à la neuropathologie.

En effet, si on se place avec certains auteurs, héritiers de la psychologie des idéologues, au *point de vue structural*, on en arrive à dire que pensée et langage s'équivalent strictement et que, en conséquence, tout aphasique présente un affaiblissement intellectuel. Cette métaphysique nominaliste est d'usage courant, encore à l'heure actuelle, chez certains neurologistes. Remarquons, en outre, qu'elle caractérise le complexe des phénomènes étudiés uniquement par son côté négatif, c'est-à-dire ignore le principe

<sup>1</sup> Le lecteur devra se rapporter pour l'exposé intégral des idées de M. Head au mémoire suivant: "Aphasia and Kindred Disorders of Speech" (Linacre lecture for 1920), *Brain*, Part 2, vol. 43 (July, 1920).

d'Hughlings Jackson, que la maladie, par les symptômes qu'elle présente, n'est pas l'expression de symptômes négatifs, ce qui n'a pas de sens, mais est la manifestation des degrés inférieurs de l'activité mentale. Or parcourons, par exemple, l'auto-observation du Dr Saloz père, de Genève, qui fut atteint d'aphasie totale suivie de guérison<sup>1</sup>. Ce malade a fort justement noté l'indépendance de la pensée et du langage, lorsqu'il écrit :

Dans l'aphasie verbale, la persistance (ou la persévération) du souvenir du *son* du mot correct (ou de la lettre) n'implique pas la conservation de sa notion compréhensive, c'est pourquoi je dis qu'il y a toujours à ce moment-là, dans l'aphasie verbale, un déchet plus ou moins fort de l'intelligence du phénomène et par conséquent du malade lui-même.

M. Naville observe, en passant, que le Dr Saloz illustre ici les deux concepts allemands du *Wortlautbegriff* et du *Wortsinnverständnis*.

Par contre, l'absence d'évocation du mot n'implique nullement l'absence de ce que le malade appelle '*l'idée intuitive*' de ce mot :

J'insiste de nouveau, dit-il, afin de mieux faire comprendre ma pensée, que chez l'aphasique entaché de surdité verbale *relative*, il existe en tout cas une sorte de paraphrasie incomplète (comme chez moi, par exemple) caractérisée *par le sentiment de la conservation quand même de l'idée intuitive du mot plus ou moins correctement énoncé*<sup>2</sup>, mais avec perte partielle du souvenir de son émission *non appropriée à la circonstance*, ce qui donne très souvent au discours du dit aphasique cet air embarrassé, bourru, inquiet et souvent malheureux, parce que, sentant lui-même l'insuffisance de ses propres moyens de compréhension de la notion du mot formé, il est toujours tourmenté par le sentiment d'oublier une partie de ses éléments, ce qui lui procure l'impression que l'observateur ne peut le comprendre, ce qui arrive en effet très fréquemment<sup>3</sup>.

Nous n'avons rapporté les deux remarques précédentes que pour mieux marquer l'indépendance globale des deux processus du langage et de la pensée. Nous tenterons tout à l'heure d'arriver à une formule plus précise. Pour cela, faisons encore appel à l'auto-observation du Dr Saloz, et essayons de mettre en relief le complexe de symptômes qui reparaissent le plus souvent sous sa plume, ce qui, de son point de vue d'aphasique, constitue le point cardinal de son affection :

J'ai eu souvent l'impression que je tenais la lettre, la syllabe ou le mot en *puissance*<sup>4</sup>, mais par le fait d'un *accroc intempestif*, les voies psychologiques ont été subitement comprimées, déviées, oblitérées, coudées, etc., ou peut-être inhibées temporairement

<sup>1</sup> F. Naville, "Mémoires d'un médecin aphasique. Auto-observation et notes psychologiques du Dr Saloz père, de Genève, atteint d'aphasie totale suivie de guérison," *Archives de psychologie*, t. XVII, mai, 1918.

<sup>2</sup> Souligné par nous.

<sup>3</sup> *Loc. cit.* pp. 17, 18.

<sup>4</sup> Souligné par nous.

dans certaines circonstances. Il en résulte souvent qu'à la place du mot, de la syllabe et surtout de la lettre initiale, c'est un autre élément qui vient les remplacer, ce qui donne au discours une allure souvent incompréhensible et baroque, et par suite un cachet de timidité et de mélancolie: "*Je ne suis jamais dans le cas de savoir au préalable si je peux m'exprimer ou non*<sup>1,2</sup>."

Et ailleurs:

Quelque temps plus tard, je ne pouvais pas avoir le mot de *marasquin*, et je disais toujours *maraquecin* ou *mascarin*, sachant que ce mot commence par un *m*, mais ne pouvant pas avoir le mode de succession des différentes lettres du mot, je recherchais toujours les voies pathologiques resserées, comprimées, tortueuses, oblitérées, coudées, obstruées, des tubes, des fibres et des cellules nerveuses qui se trouvaient dans le département de mon aphasie afin de les déboucher, de les redresser et de les découder. Je faisais de très grands efforts pour remettre ces voies à l'état de correction; je sentais très bien que la lettre, les syllabes et le mot allaient me revenir comme un écho lointain qui se rapproche toujours plus, jusqu'à ce que j'aie pu trouver effectivement le mot cherché. Alors j'ai eu comme le sentiment d'un effort fructueux et fécond de détente<sup>3</sup>.

De même:

Quand j'ai commencé à lire, j'ai dû débiter naturellement par les lettres de l'alphabet. Je me souviens très bien qu'au début, la lettre ne me disait rien, puis, plus tard, qu'il y avait des lettres que je ne pouvais pas avoir, surtout *b, c, f, g, l, m, n, p, r, t, v*. J'étais souvent obligé de recommencer l'*a, b, c*, pour avoir une lettre. *J'ai eu aussi une difficulté extraordinaire pour avoir les diphthongues. J'ai encore souvent le sentiment qu'il y a entre la lettre, la syllabe et le mot, une désharmonie que l'on ne peut pas vaincre facilement....* J'avais toujours l'impression d'une difficulté énorme à suivre ma voie en ligne droite. Il me semblait surtout que des accidents multiples se produisaient pour entraver la bonne marche du phénomène psychologique, tels que accroc, pannes, retards, déviations, retours en arrière, compressions, resserrements, dilatations, vagues vaso-motrices, inhibition, etc.; phénomènes que le psychologue non prévenu attribuerait à un défaut de compréhension, ce qui équivalait pour le profane à une déchéance intellectuelle...<sup>4</sup>.

Le Dr Forel, dont les travaux sur le système nerveux et les fourmis sont bien connus, et qui a également relaté l'auto-observation des légers troubles du langage dont il a été atteint à la suite d'une lésion cérébrale très vraisemblablement circonscrite du cerveau, fait des remarques exactement superposables aux précédents:

En définitive, dit-il, je peux prononcer tous les mots, en parlant avec une lenteur suffisante ou en scandant. Mais certaines consonnes, par exemple *s, t*, viennent plus difficilement; à ce moment je ressens par l'introspection un effort de la parole fortement inhibiteur. Celui-ci est souvent si grand, surtout lorsque je suis un peu excité et que j'ai le désir de parler plus vite, que j'applique presque involontairement les doigts de la main gauche contre la lèvre inférieure, pour en extirper, pour ainsi dire,

<sup>1</sup> *Idem.*

<sup>2</sup> *Ibidem*, p. 13.

<sup>3</sup> *Loc. cit.* p. 15.

<sup>4</sup> *Loc. cit.* pp. 13, 14. Souligné par l'auteur des mémoires.

les consonnes en question. Cependant je ne vois pas du tout que ce phénomène ait aucun rapport avec une contraction musculaire quelle qu'elle soit. Car (1<sup>o</sup>) la langue et la mâchoire ont leurs mouvements entièrement libres, et (2<sup>o</sup>), quelques minutes après, par le repos ou à l'occasion d'un autre mot, ou en chantant, je peux prononcer facilement la même consonne, ce qui ne serait pas le cas s'il y avait contracture musculaire. C'est pourquoi je peux considérer les résistances, que je ressens fortement, par introspection, lorsque je parle, sous forme d'inhibitions, comme d'origine cérébrale (centrale) et non comme les conséquences de contractures musculaires<sup>1</sup>.

Forel interprète ses propres troubles comme relevant d'une inhibition de l'*ecphorie des engrammes*. Nous pensons que cette interprétation est exacte mais trop générale, le langage objectif de Semon manquant de précision.

A première vue, il semblerait qu'il s'agisse ici d'un phénomène analogue à l'exemple que nous avons emprunté à l'auto-observation du Dr Saloz, où le processus parcouru pour arriver à la prononciation correcte du mot '*marasquin*' semble calqué sur un processus mnémonique; mais l'hypothèse simple de l'oubli ne peut, de l'aveu même de Forel, s'appliquer à son cas, puisque, comme le remarque aussi le Dr Saloz (remarque banale d'ailleurs) le même mot ou les mêmes consonnes qui ne peuvent être retrouvés à un moment donné le sont, quelques instants après, soit par le moyen du chant, du rythme ou tout simplement du repos.

Il nous semble qu'ici il s'agit d'une atteinte de ce que A. Pick appelle les éléments '*musicaux*' du langage. Nous croyons qu'il serait d'un grand intérêt philosophique, comme nous le verrons, de nous demander si ces éléments '*musicaux*' ne constitueraient pas une partie seulement d'une fonction cérébrale plus générale ou plutôt plus étendue. Suivant toujours d'aussi près que possible les faits cliniques, voici les phénomènes qui nous ont amené à nous poser cette question. Forel remarque, dans son auto-observation que ses facultés de travail n'ont pas baissé sensiblement, une volonté inébranlable de lutter contre les conséquences de son apoplexie ayant atteint chez lui son plein épanouissement. Remarquons que M. Forel est biologiste; cela a son importance. C'est par une remarque exactement semblable que débutent les Mémoires du Dr Saloz, qui, ainsi qu'on a pu s'en apercevoir par les passages que nous en avons cités, témoignent d'une certaine pénétration. Or Forel, qui, *au cours de son affection a pu découvrir une espèce nouvelle de fourmis*, fait sur lequel nous attirons tout particulièrement l'attention, était devenu

<sup>1</sup> A. Forel, "Subjektive und induktive Selbstbeobachtung über psychische und nervöse Tätigkeit nach Hirnthrombose (oder Apoplexie)," *Journ. f. Psychol. u. Neurol.*, Bd. 21, 1915, p. 434.



incapable d'exécuter la plus simple opération d'arithmétique. C'est le trouble intellectuel qu'il met au premier plan de ses préoccupations:

Avant tout, le calcul et surtout le simple fait d'additionner m'était particulièrement pénible. Je n'ai jamais été un calculateur virtuose, parce que des pensées intercurrentes avaient pour effet de me distraire; mais maintenant la chose devenait tout à fait grave. Je confondais fréquemment les chiffres à retenir avec ceux à écrire ou je confondais les colonnes à additionner et autres absurdités pareilles. Je remarquais toujours la chose aussitôt, mais j'avais la plus grande peine à ne pas faire toujours des fautes de ce genre. Je faisais des omissions particulièrement nombreuses en comptant, ce qui me causait beaucoup d'ennuis...<sup>1</sup>.

Forel remarque, en outre, qu'il omettait des lettres en écrivant, ne pouvait dire s'il avait tourné ou non le bouton de l'électricité, si la porte était ouverte ou fermée.

Parti des troubles classiquement dénommés aphasiques, nous pensons qu'il est temps actuellement de montrer que les phénomènes cités en dernier lieu ne paraissent pas d'une nature essentiellement hétérogène. D'une part, en effet, on peut très bien admettre que les troubles du calcul ne sont que l'expression d'une atteinte du *langage intérieur*, celui-ci se manifestant par des *mouvements naissants d'articulation*. Le calculateur prodige Inaudi était incapable de calculer, quand on empêchait les mouvements de la langue. D'autre part, d'une façon plus générale, et, sans qu'il y ait contradiction avec ce point de vue, il nous semble que les phénomènes aphasiques (et par là nous entendons les deux formes distinguées, dès 1868, par Hughlings Jackson, et appelées plus tard *aphasie motrice* et *aphasie sensorielle*) relèvent d'un trouble fondamental qu'on pourrait appeler la perte (plus ou moins complète, plus ou moins élective, nous reviendrons là-dessus) de la *fonction de découpage et d'opposition de l'intelligence*. Particulièrement suggestives à cet égard nous paraissent les recherches récentes de Van Woerkom, entreprises d'ailleurs dans un but et avec des conclusions tout à fait différentes des nôtres<sup>2</sup>.

Il s'agit d'un cas d'aphasie type Broca en voie de régression, chez lequel le neurologiste hollandais a mis en lumière une perturbation de l'orientation spatiale (en l'absence, bien entendu, de toute lésion de l'appareil vestibulaire) et de ce qu'il appelle la notion du temps et du nombre des plus curieuses. Voici quelques passages de cette observation. Elle avait attiré notre attention avant que nous ayons eu connaissance

<sup>1</sup> *Loc. cit.* p. 429.

<sup>2</sup> Van Woerkom, "Sur la motion de l'espace (le sens géométrique). Sur la notion du temps et du nombre. Une démonstration de l'influence du trouble de l'acte psychique de l'évocation sur la vie intellectuelle." (*Revue neurologique*, 1919, No. 2.)



du mémoire de M. Head, où sont rapportés certains faits du même genre. Voici donc ce que dit M. Van Woerkom :

A ma demande, le malade me montre la main droite, mais il est embarrassé quand je le prie de me donner la main gauche. Invité à porter la main droite vers le côté gauche ou le côté droit, il se trompe continuellement. Assis à côté de lui, je mets entre nous deux une règle et je l'invite à placer une pièce de monnaie soit de mon côté, soit du côté de la règle: même après démonstration, la notion des deux côtés lui reste vague....Il ne sait pas s'il va en haut ou en bas quand il descend l'escalier. Ce même trouble est constaté pour la direction sagittale....Invité à mettre une règle à quelque distance, mais de la même manière qu'une autre règle, qui est mise devant lui, il fait des efforts multiples, mais paraît incapable de trouver la direction parallèle; en outre, le malade rapproche, malgré mes protestations, sa règle de la mienne, de sorte que bientôt les deux règles sont superposées....Je présente à mon malade trois sortes de papiers, les uns en forme de carré, les autres en forme de cœur, les autres ronds; il est incapable de les mettre deux à deux malgré la reconnaissance des formes....Je place devant lui un grand carton et je l'invite à mettre trois allumettes de telle sorte qu'elles soient aussi distantes que possible. Il avance une pièce vers le bord supérieur, mais au lieu d'avancer une autre dans la direction opposée, il la fait suivre la première.

Il faut remarquer que, dans la vie quotidienne, ce trouble ne se manifeste que pour un spectateur attentif. De même, au point de vue de la notion du temps, voici ce que M. Van Woerkom a remarqué :

En battant un iambe ou un trochée (succession inverse), le malade ne peut pas se rendre compte de la différence de succession. Par contre, il a conservé le rythme de la marche, qu'il battait comme soldat. Malgré le fait que le malade nomme les jours de la semaine et les mois de l'année sans se tromper dans la succession, il ne sait pas nommer le jour ou le mois précédant ou succédant, quand il vient de lire la date. Quand on lui demande s'il fait jour ou nuit, il se contente de constater l'obscurité ou la lumière, sans arriver à une réponse nette. De même pour les saisons. Quelques fables bien connues (Petit-Chaperon rouge, Cendrillon) nous permettent une démonstration facile de la difficulté qu'éprouve le malade à s'imaginer les étapes successives dans ces petites histoires, même après des répétitions multiples de ma part....

*La notion du nombre.*—Je mets devant lui deux séries de bâtons, une série de cinq pièces, une autre série de quatre pièces. Je lui demande ce qui est plus. Il commence par compter l'une en comptant les bâtons avec son doigt: un, deux, trois, quatre, cinq. Maintenant, le malade s'embrouille, il prend le dernier bâton encore une fois, dit: six, en prend un autre de la même série, dit: sept, ou bien il en prend de l'autre série tout en continuant son compte à haute voix. Toute explication de ma part reste vaine.

Je mets devant lui quatre bâtons en l'invitant à en mettre autant. Il commence à compter de la manière décrite, sans naturellement arriver à un résultat....

En présence de deux pièces de monnaie, il en prend une, dit: un, il prend l'autre, dit: deux, reprend celle-ci ou bien la première, dit: trois. Quand je l'empêche de continuer au moment où il a prononcé le chiffre deux, en disant: "C'est bien, main-

tenant, dites-moi le nombre," il est embarrassé et finit par dire: "Je ne sais pas."... Le nombre de ses enfants lui est inconnu; il sait pourtant leurs noms.

Le malade est également incapable d'apprécier le nombre des coups que je donne sur la table; en frappant toutes les fois le nombre deux, il dit que cela lui rappelle la machine de son bateau; en donnant les coups isolés il dit: "C'est comme un clou qu'on plante dans une planche," mais il ne saisait pas la différence arithmétique.

Ainsi nous assistons au curieux spectacle d'un malade, qui a conservé l'acte de la numération, mais qui, pourtant, a perdu toute notion du nombre. Il a perdu cette notion pour les objets séparés dans l'espace comme pour les sons séparés dans le temps....

L'agraphie est absolue dans une phrase où la lecture est déjà facile. Invité à copier le mot *Poot* avec des lettres mobiles, il met *Ppot*, le mot *Saur* il met *Asar*. Parfois, les lettres sont mises au-dessus les unes des autres. Quand je lui fais copier des séries de lettres, qui sont sans signification verbale, il se trompe dans la succession; de même pour les séries de barres de couleur différente. Les troubles que nous constatons dans l'écriture (la malade tient la plume adroitement) se laissent résumer ainsi:

(1°) déformation des lettres dans la dictée comme dans la copie, il écrit *p* pour *d*; *j* pour *l*;

(2°) impossibilité de garder la ligne horizontale dans l'écriture, parfois les lettres sont dans une ligne verticale;

(3°) réduction du nombre des lettres (l'augmentation est plus rare);

(4°) trouble de la succession des lettres....

Même dans l'écriture sous la dictée, le malade s'en aperçoit, quand il a fait une faute; il indique la place qui lui paraît fautive, mais ne peut la corriger.

*L'épellation* ne réussit guère mieux que l'écriture, parfois même il écrit un mot spontanément qu'il ne peut pas épeler.

*L'épreuve de Proust-Lichtheim-Déjerine* est négative. Je lui demande combien de fois il ouvre la bouche dans le mot 'olifant,' il compte sur les doigts jusqu'à cinq.... Malgré l'absence d'agrammatisme véritable et malgré le fait qu'il sait le contenu de la phrase à écrire, il est incapable de formuler son savoir dans une phrase. Il faut que je lui précise les premiers mots, alors il peut continuer. Comme il le dit lui-même: "Je ne peux pas trouver le commencement."

L'observation de Van Woerkom, dont nous venons de rapporter les parties essentielles, nous paraît du plus haut intérêt pour l'hypothèse que nous hasarderons sur la psychologie de la pensée chez l'aphasique. Ce qui caractérise essentiellement le cas du neurologue hollandais, ce sont des troubles de *l'orientation spatiale* d'origine corticale, c'est-à-dire, en définitive, si on peut s'exprimer ainsi, de la *fonction de découpage et d'opposition* de l'intelligence. Nous allons voir en quel sens il faut prendre cette expression. Lorsque le malade ne peut orienter une règle par rapport à une autre, quand il ne sait s'il va en haut ou en bas quand il descend l'escalier, la perturbation de l'orientation est manifeste; mais nous croyons que, malgré les apparences, tous les autres troubles qu'il présente (y compris ceux que Van Woerkom range sous la rubrique de

*notion du temps*) peuvent être ramenés à des phénomènes d'ordre spatial. Notons seulement, en passant, que nous prenons ici la notion d'espace au sens psychologique du mot, c'est-à-dire dans le sens d'objets étendus, distincts les uns des autres et constituant des unités concrètes; c'est *l'espace perçu*, par opposition à la notion géométrique que nous n'avons pas à envisager ici. En ce sens l'espace est essentiellement *distinction, découpage, différenciation, opposition*; en ce sens nous pensons que le fait de ne pas pouvoir distinguer une pluralité d'unités concrètes par comparaison avec une autre unité (expériences avec des séries de bâtons ou des pièces de monnaie) est un fait de même ordre que l'impossibilité de se représenter les phases diverses d'un récit quelconque. Remarquons toutefois que le malade de Van Woerkom, ainsi que ce dernier le relève, a conservé intact *l'acte de la numération*; il s'agit de la conservation d'un acte acquis plus anciennement, par conséquent d'un système plus stable et plus automatique que la dissolution n'a pas atteint (Hughlings Jackson). Mais le sentiment intellectuel de la *différenciation*, d'acquisition plus récente et partant moins automatique et moins bien organisée, fait défaut. C'est un phénomène d'observation banale chez le jeune enfant.

Arrivons-en maintenant à *l'agraphie*, pour employer une expression consacrée par l'usage, mais aussi vicienne que celle d'*aphasie*. Le trouble constaté dénote encore ici un défaut de différenciation, d'opposition des lettres. Mais ce qui montre, semble-t-il, qu'il s'agit d'un phénomène dépassant le cadre de l'écriture, c'est que les mêmes erreurs de succession se produisent pour les séries de barres de couleur différente, qui, eux, ne sont pas des symboles graphiques. Notons, en outre (fait dont la *nature spatiale* saute plus rapidement aux yeux), l'impossibilité de garder la ligne horizontale dans l'écriture.

De même que ce malade avait conservé la numération mais non la différenciation d'une pluralité d'objets par comparaison avec une autre, de même, dans l'écriture sous la dictée, il peut indiquer l'endroit où il y a une faute sans pouvoir la corriger. Ce petit fait (qui, comme beaucoup d'autres, peut se retrouver à l'état dit normal) montre bien la *dissociation*, conforme au principe de la dissolution d'Hughlings Jackson, *de l'intuition et de la connaissance différenciée*.

Encore plus remarquable, dans le même sens, est le fait que, tout en sachant le contenu de la phrase à écrire (probablement sous forme d'une intuition immédiate), il est incapable, à moins de lui préciser les premiers mots, de formuler son savoir dans une phrase. Cette constatation suffirait, à elle seule, remarquons-le, en passant, à rendre insoutenable la

thèse de MM. P. Marie et Montier, qui identifient pensée et langage: car, parti des troubles grossiers de l'orientation spatiale présents chez le même malade, nous voilà revenus au problème de la *pensée symbolique* (Head).

C'est qu'en effet, de même qu'il ne lui était pas possible de découper dans l'espace homogène les diverses directions par rapport à son corps, de même il ne pouvait pas découper les diverses unités concrètes qu'on lui mettait devant les yeux, ni découper dans le temps la succession des sons, ni découper les lettres dans l'écriture, ni découper à l'aide des mots la continuité plus ou moins homogène de sa pensée.

M. Head a rapporté plusieurs faits du même genre finement analysés: chez plusieurs de ses malades, la notion de la relation de divers objets dans l'espace paraît absente. Il note plusieurs fois chez ses *aphasiques* la difficulté qu'ils ont de dresser un plan de lieux familiers, à moins qu'on ne leur donne des points de repère. La même *notion de rapport* appliquée non plus à l'espace mais à la suite logique de faits de la vie courante se retrouve dans l'exemple suivant de M. Head:

Le n° 10 se souvenait qu'en achetant du tabac il plaçait deux shillings sur le comptoir et recevait deux onces de tabac et trois pence de monnaie, mais il ne pouvait dire combien lui coûtait le tabac. *Il pouvait enregistrer les faits correctement, mais ne pouvait les relier les uns aux autres*<sup>1</sup>.

Tout se passe donc comme si la pensée du sujet se présentait tantôt comme une masse indifférenciée, tantôt comme formée d'unités isolées. Dans les deux cas, toute opposition est impossible.

Tous ces faits montrent bien, comme y insiste M. Head, que le terme d'*aphasie* est absolument faux en ce sens que ce qu'on appelle vulgairement le langage est loin d'être seul atteint. Pour M. Head, la notion de *pensée symbolique et expression*, destinée à renouveler la vieille conception de l'aphasie basée sur la *psychologie substantialiste*, déborde le cadre du langage, cette désignation ayant été choisie, nous dit l'auteur, parce que les troubles les plus graves et les mieux définis ont été constatés dans *l'emploi* des mots, des nombres et autres symboles. M. Head reconnaît cependant qu'on ne peut supposer que cette expression définisse exactement les limites et l'étendue de la perte actuelle de la fonction, qui peut être découverte avec la série si ingénieuse des tests qu'il a proposés.

Le point de vue que nous esquissons ici n'est que le prolongement de ses idées, en ce sens que la notion de *pensée symbolique et expression* d'une exactitude clinique rigoureuse, ne serait pour nous qu'un cas

<sup>1</sup> *Loc. cit.* p. 161. Souligné par nous.



particulier de la *notion d'opposition*. Certains des phénomènes sur lesquels M. Head insiste à plusieurs reprises, tel que le fait que certains sujets (les anarthriques par exemple) imitent parfaitement bien le geste accompli derrière eux devant une glace, mais ne peuvent le reproduire placé face à face avec l'expérimentateur, nous paraissent pouvoir être interprétés dans un sens différent et plus simplement que ne le fait l'éminent neurologue.

M. Head suppose, dans ce cas, que le sujet invité à imiter par exemple le mouvement du bras de celui qui est devant lui, doit faire agir son *langage* intérieur et mettre d'abord sous *forme de proposition* l'acte à accomplir (acte à intermédiaire symbolique verbal), tandis qu'en face de la glace, il s'agit d'une simple imitation. Ne serait-il pas possible, dans certains cas du moins, d'interpréter le phénomène en terme de mouvements; le sujet ne pouvant exécuter la transposition spatiale nécessitée pour l'imitation des mouvements de l'expérimentateur placé devant lui? Remarquons d'ailleurs que, dans le cas de l'intermédiaire du langage intérieur supposé par M. Head, il s'agit encore de l'atteinte de la même *fonction d'analyse et d'opposition*. C'est le seul point qui doive nous retenir ici.

M. Head fait également remarquer que si on demande au même sujet de décrire les mouvements qu'il voit dans le miroir, il fait de grossières erreurs. Ne pourrait-on pas admettre que l'acte imité correctement devant le miroir l'est par suite d'une *intuition immédiate*, sans que la décomposition du mouvement intervienne nullement, tandis que l'expression verbale ne peut exister sans cette décomposition? *Qu'il s'agisse de langage ou de mouvements*, plus le nombre des alternatives possibles, c'est-à-dire au fond des *rapports*, sera grand, plus il sera certain que l'action désirée sera défectueuse. Cette remarque est de M. Head lui-même.

Le même auteur a mis en lumière, pour la première fois croyons-nous, dans ce qu'il appelle *aphasie sémantique*, un symptôme qui nous paraît d'un grand intérêt psychologique. Il s'agit de ce qu'il appelle *l'ultime intention du symbole*; rappelons un de ses exemples: 'Le n° 10 comprenait les mots *Été* et *Heure* et était sûr que *Heure d'été* signifie que les horloges sont changées avec la venue de l'été. Mais il était absolument incapable de dire si on les avançait ou si on les retardait, et essayait en vain de résoudre le problème<sup>1</sup>.' M. Head ajoute très justement que si ces mêmes malades ne peuvent additionner ou soustraire avec certitude, c'est parce que ce sont les *processus de l'arithmétique* qui

<sup>1</sup> *Loc. cit.* p. 161.



ont été perdus et non la signification directe des nombres. Comme on le voit, c'est encore ici la *fonction de découpage et d'opposition de l'intelligence* dont nous retrouvons l'atteinte.

Que, maintenant, ces mêmes malades soient atteints, également et dans le même sens, dans leurs actes, c'est ce qu'a très finement observé M. Head:

Ainsi quand le n° 10 arrangeait avec du fil un cadre de ses ruches, il pouvait faire ce travail s'il consistait à passer le fil d'un côté à l'autre du cadre, puis à revenir l'enfiler dans des trous voisins, mais aussitôt qu'il voulait aller d'un coin à l'autre, il ne pouvait. *Il pouvait accomplir un acte continu, mais était embarrassé si la discontinuité du travail l'obligeait à formuler son intention.* De la même façon un jeune officier, le n° 1, était incapable de mettre son ceinturon quand les eoulants avaient été déplacés<sup>1</sup>.

Lorsque M. Head nous dit qu'un malade, incapable de mettre une montre à l'heure sur *ordre verbal*, le fait correctement lorsqu'il règle *par la vue* sa montre sur une autre, peut-être n'est-il pas nécessaire de voir dans les deux cas un phénomène de nature *essentiellement* différente. Dans l'ordre verbal de: "*Mettez votre montre à 5 heures moins le quart,*" il s'agit pour le sujet de la réalisation mentale d'un grand nombre de rapports (rapport de temps, de propriété (car il s'agit de la montre qui lui appartient et non d'une autre), rapport de l'heure par opposition à la minute, opposition du plus et du moins, etc.). Au contraire dans l'acte de régler spontanément par la vue la montre à 5 heures moins  $\frac{1}{4}$  sur une autre, il ne s'agit que du rapport spatial respectif des deux aiguilles. De même si le même malade peut exécuter correctement l'ordre verbal: "*Mettez la montre à 4 h. 45,*" et ne peut exécuter celui de "*Mettez la montre à 5 heures moins le quart,*" c'est peut-être parce qu'il s'agit, dans ce dernier cas, d'un *rapport négatif* portant non sur des objets concrets mais sur une unité abstraite et conventionnelle.

L'acte le plus complexe et le plus différencié, partant le plus instable, a disparu, laissant subsister l'acte plus simple et moins différencié (Hughlings Jackson). Ce qui fait, semble-t-il, comme l'a très justement observé M. Head, que plus une action symbolique se rapproche d'une forme propositionnelle, plus elle présentera de difficultés, c'est, semble-t-il qu'il s'agisse de langage *sensu stricto* ou de mouvements, parce que *nombre des rapports possibles* augmente en proportion.

Dans l'auto-observation du Dr Saloz, nous voyons que tantôt le mot est prononcé avec absence de sa notion compréhensive, tantôt il y a conservation de l'*idée intuitive* du mot avec erreur de prononciation, tantôt, enfin, le malade remarque qu'il tenait la lettre, la syllabe ou le

<sup>1</sup> *Loc. cit.* p. 162. Souligné par nous.

mot *en puissance*, mais que, par le fait d'un *accroc intempestif*, les voies psychologiques, suivant l'expression pittoresque dont il se sert, ont été subitement *comprimées, déviées, oblitérées, coudées*, etc., ou peut-être inhibées temporairement dans certaines circonstances. Les mêmes images reparaissent encore sous la plume de l'auteur lorsque, à propos de ses exercices de rééducation, il remarque la désharmonie existant dans son esprit entre la lettre, la syllabe et le mot. Remarquons que ce sont toujours des comparaisons d'ordre spatial qu'il emploie pour se faire comprendre: "*J'avais toujours l'impression d'une difficulté énorme à suivre ma voie en ligne droite.*" Lorsque nous rapprochons ces faits des phénomènes de désorientation spatiale, tels que ceux relevés dans le cas de l'aphasique étudié par Van Woerkom, peut-être est-on fondé à prendre les expressions sur lesquelles nous avons attiré en passant l'attention, non plus dans un sens métaphorique, mais dans un sens réel.

On peut se demander, cependant, si l'importance que nous accordons aux *éléments musicaux* du langage n'est pas excessive et, dans tous les cas, si elle ne s'appliquerait pas exclusivement à certains malades, à ceux atteints d'*aphasie dite motrice*. L'expression d'*aphasie*, malheureusement conservée par l'usage, est une expression absurde, comme l'a montré Hughlings Jackson. Un aphasique, contrairement à l'étymologie du mot, n'est jamais totalement dépourvu de langage; ce qui lui en reste semble pouvoir s'interpréter très bien par le degré de la dissolution et le *niveau mental* du sujet au moment considéré. C'est là un des côtés les plus originaux et les plus profonds de la pensée d'Hughlings Jackson et une question qu'il n'entre pas dans nos vues d'exposer ici. Nous considérons ici seulement la nature de la fonction atteinte, lorsque les malades ne parlent pas ou parlent incorrectement.

Quant à la question de savoir si notre représentation des phénomènes aphasiques est unilatérale, c'est-à-dire ne s'applique qu'à ce que P. Marie appelle l'anarthrie, elle soulève aussi un bien gros problème, celui de l'unité ou de la dualité des deux complexes pathologiques inexactement dénommées *aphasie de Broca* et *aphasie de Wernicke*. Non seulement nous n'avons, fort heureusement pas, à l'envisager ici, mais encore nous pouvons restreindre la question à nous poser au point suivant: peut-on faire intervenir la déficience de la *fonction de découpage et d'opposition* dans l'interprétation des phénomènes négatifs observés (ce qu'on appelle classiquement par exemple la *surdité verbale*), car, ne l'oublions pas, durant tout ce travail, ce ne sont que les phénomènes négatifs que nous avons en vue? Bien entendu, nous admettons avec M. P. Marie (1906) que la *surdité verbale pure* est une conception théorique sans existence

clinique; nous n'avons en vue maintenant que le *complexe de phénomènes* ainsi désignés classiquement.

Ici, nous ne pouvons mieux faire que de nous reporter à la fine analyse que M. Bergson a donnée dans *Matière et Mémoire* de l'audition du langage articulé. Loin d'être un acte purement réceptif il entre dans la catégorie des phénomènes que M. Sherrington appelle aujourd'hui les *phénomènes anticipateurs*, caractéristiques des *récepteurs à distance* (*distance-receptors*). Lorsque nous écoutons parler quelqu'un, nous scandons la parole entendue, non pas en suivant parallèlement l'articulation de chaque mot, mais seulement les contours saillants de la phrase. C'est le *schéma moteur* de M. Bergson, qui, ainsi qu'il l'a remarqué, est accompagné d'un certain travail intellectuel rudimentaire. Nous dirons en passant que nous croyons à l'exactitude de cette vue, non pas pour des raisons d'ordre théorique, mais parce que, ayant eu à nous occuper des hallucinations auditives présentées par les aliénés, nous avons pu nous rendre compte que chez les malades qui "*disent entendre des voix*," les mouvements des lèvres et du larynx ne font *jamais* défaut.

Ce serait le lieu de rappeler également ici qu'on a observé des hallucinations auditives chez des sujets aphasiques, dont la caractéristique *phonétique* était celle des troubles aphasiques eux-mêmes (A. Pick). Il y a d'ailleurs ici un phénomène qui, au point de vue physiologique, intéresse probablement l'organisme entier du sujet et constitue une partie de ce que l'on a appelé: *attitude, situation* (A. Pick) ou *adaptation*.

Du point de vue psychologique, il s'agit d'un phénomène incontestablement intellectuel. Comme l'a bien montré M. Bergson, si nous ne percevons que des fragments de ce que nous entendons ou de ce que nous lisons, c'est par le *sens* que nous entreprenons la reconstitution des formes et des sons. Demandons-nous seulement ce qu'il faut entendre par le mot *sens* que nous avons prononcé dans la phrase précédente? Il s'agit des relations abstraites que "nous matérialisons imaginative-ment en mots hypothétiques qui essaient de se poser sur ce que nous voyons et entendons." C'est là l'essentiel du *schéma dynamique* de M. Bergson, c'est ce que Bühler, postérieurement à cet auteur, a appelé la *construction anticipatrice* (die Vorkonstruktion). Hughlings Jackson, bien antérieurement, avait parlé dans le même sens de la '*forme propositionnelle*,' précédant l'apparition des mots dans la conscience.

Pour revenir à la pathologie, nous croyons que ces notions permettent d'interpréter ce que les classiques appelaient la *surdité verbale*, dans les cas où elle se présente, autrement que par la perte hypothétique des images auditives; mais ce n'est pas ce point, que nous considérons comme

définitivement acquis, qui doit retenir notre attention. Nous voulons simplement faire remarquer que le travail anticipateur de l'esprit représenté par le *schéma dynamique* constitue un travail de découpage; mais, ici, ce dernier est effectué avec l'aide de l'appareil cérébral *récepteur*. Dans ce qu'on appelle: *aphasie motrice*, l'appareil cérébral *effecteur* seul semble en jeu.

Il n'en reste pas moins qu'il y a quelque chose de commun aux deux formes classiques de l'aphasie. Dans les deux cas, la *fonction de découpage et d'opposition* de l'intelligence est atteinte, mais pas sur le même plan. D'ailleurs, c'est une banalité de remarquer qu'il n'y a pas deux malades qui se ressemblent, parce qu'à l'état normal, il n'y a vraisemblablement pas deux individus dont l'évolution antérieure du psychisme soit superposable; d'autre part, tout état pathologique, comme tout phénomène se produisant chez un être vivant, étant un devenir, il y a lieu d'envisager toutes nos observations comme des abstractions. Le concept même d'*aphasie*, qui s'est déjà présenté maintes fois sous notre plume, est une pure abstraction sans réalité, comme nous l'avons fait remarquer, si on le prend au pied de la lettre.

Mais ici, on ne saurait trop y insister, pour éviter le reproche de simplifier à l'excès les phénomènes, notre but n'est pas d'étudier la réalité clinique dans toute sa complexité, comme M. Head l'a fait avec tant de pénétration, en distinguant ses quatre formes de troubles de la *pensée symbolique*, mais de l'utiliser dans le but de voir si elle est susceptible de nous laisser entrevoir la direction dans laquelle il faut chercher pour arriver à nous faire une idée de la nature biologique de la pensée et du langage. Il nous a semblé que ce qui constituait le processus essentiel atteint dans les deux formes classiques d'aphasie était la *fonction de découpage et d'opposition* de l'intelligence.

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\* \*

Abandonnant, maintenant, un instant le domaine de la pathologie, demandons-nous si les lois récemment élaborées par la linguistique sont d'accord avec cette conception. Sans doute, le *langage* n'est pas la *langue*, celle-ci ayant une existence et une évolution relativement autonomes; mais ce ne sont pas deux phénomènes absolument hétérogènes, et Arnold Pick a bien montré tout l'intérêt que la neurologie pouvait retirer de l'étude de la linguistique. Depuis la publication du livre bien connu de Pick (1913), l'apparition du "*Cours de linguistique générale*" de Ferdinand de Saussure, et le commentaire de ses idées par quelques-uns de ses disciples est un événement dont le neurologiste n'a pas le droit de se désintéresser. Ici, nous réclamerons quelque indulgence, car nous



ne sommes pas spécialiste de cette science si complexe et hérissée de tant de difficultés. C'est pourquoi nous citerons de préférence nos références, plutôt que nous ne les commenterons.

Tout d'abord, d'un point de vue négatif, il est curieux de constater que les linguistes modernes sont d'accord avec les observations des neurologistes (H. Jackson en premier lieu) pour affirmer que le mot isolé est une *abstraction vaine*, suivant l'expression de M. Meillet. On sait, par contre, que, d'après Ferdinand de Saussure, la notion qui est à la base de la linguistique est la notion de *valeur*. Qu'entend-il par là? "Pour déterminer ce que vaut une pièce de cinq francs, il faut savoir: (1<sup>o</sup>) qu'on peut l'échanger contre une quantité déterminée d'une chose différente, par exemple du pain; (2<sup>o</sup>) qu'on peut la comparer avec une valeur similaire du même système, par exemple une pièce d'un franc, ou avec une monnaie d'un autre système (une livre sterling, etc.). De même un mot peut être échangé contre quelque chose de dissemblable: une idée; en outre il peut être comparé avec quelque chose de même nature: un autre mot. Sa valeur n'est donc pas fixée tant qu'on se borne à constater qu'il peut être *échangé* contre tel ou tel concept, c'est-à-dire qu'il a telle ou telle signification; il faut encore le comparer avec les valeurs similaires, avec les autres mots qui lui sont opposables. Son contenu n'est vraiment déterminé que par le concours de ce qui existe en dehors de lui. Faisant partie d'un système, il est revêtu, non seulement d'une signification, mais aussi et surtout d'une valeur, et c'est tout autre chose<sup>1</sup>." Comme on l'a remarqué, de Saussure, sous l'influence de sa conception de la valeur linguistique, en arrive à affirmer que dans la langue il n'y a que des différences: "Qu'on prenne le signifié ou le signifiant, la langue ne comporte ni des idées ni des sons qui préexisteraient au système linguistique, mais seulement des différences conceptuelles et des différences phoniques issues de ce système. Ce qu'il y a d'idée ou de matière phonique dans un signe importe moins que ce qu'il y a autour de lui dans les autres signes. La preuve en est que la valeur d'un terme peut être modifiée sans qu'on touche ni à son sens ni à ses sons, mais seulement par le fait que tel autre terme voisin aura subi une modification<sup>2</sup>."

A. Sechehaye, un des disciples du maître de la linguistique contemporaine, a encore insisté sur le caractère strictement différentiel des valeurs linguistiques. "Un mot comme *cheval*," dit-il, "paraît avoir un

<sup>1</sup> F. de Saussure, *Cours de linguistique générale*, publié par Ch. Bally et A. Sechehaye, avec la collaboration de A. Riedlinger. Payot, Lausanne et Paris, 1916, p. 166.

<sup>2</sup> *Loc. cit.* p. 172.



son par lui-même et un sens à lui, mais de Saussure nous déclare qu'il y a là une part d'illusion; la véritable raison d'être du mot *cheval* est en dehors de lui, dans tout le reste de la langue, car: *ni les signes phoniques de la langue, ni les idées qu'ils représentent n'existent autrement que par les différences que l'on constate entre tous ces signes phoniques d'une part et toutes ces idées d'autre part....*D'ailleurs ce principe fondamental du signe purement différentiel se vérifie aussi empiriquement dans certains faits d'observation banale. Si quelqu'un nous demandait: 'Croyez-vous qu'une diction impeccable soit vraiment nécessaire pour l'intelligence du langage?' nous répondrions: 'C'est selon.' En effet, nous faisons dans ce domaine deux sortes de constatations diamétralement opposées. Quelquefois une très légère nuance d'articulation observée peut prévenir un malentendu (par exemple entre *vous oubliez* et *vous oubliez* ou dialectalement, entre *la voie* et *la voix*, *l'ainé* et *l'ainée*), et d'autres fois nous avons des complaisances presque illimitées pour des prononciations relâchées et même vicieuses. Cela n'est-il pas la preuve que dans le travail qui consiste à entendre et à comprendre, notre oreille ne s'intéresse aux sons que dans la mesure où ils sont nécessaires pour éviter des confusions de signes<sup>1</sup>?"

Remarquons en passant que cette théorie de la *valeur oppositive* nous permet de comprendre comment le même mot peut paraître avoir disparu chez un aphasique, sauf dans certaines phrases. Il est évident que ce phénomène serait plus difficilement explicable dans l'hypothèse qui considérerait le mot comme ayant une existence autonome. D'une façon générale, on voit que la théorie de la *valeur oppositive* de Ferdinand de Saussure est d'accord avec ce que nous avons cru pouvoir considérer, d'après les cas pathologiques, comme caractéristique du langage, à savoir la *fonction de découpage et d'opposition* de l'intelligence, dont le langage, rappelons-le, paraît n'être qu'un cas particulier.

Revenons maintenant à nos *aphasiques* et essayons de nous rendre compte de ce qu'il y a derrière leur mutisme apparent. Les seuls documents utilisables, à notre connaissance, en la circonstance, au point de vue des données immédiates de l'introspection, sont les *Mémoires d'un aphasique* dont nous avons déjà parlé. Dès les premières lignes, il nous dit:

J'ai le souvenir que tout me paraissait un peu tomenteux, un peu nuageux, comme dans un rêve ou plutôt un eauchemar....J'avais à certains moments l'impression comme d'un voile qui s'appesantissait sur moi et me rendait mes pensées flous comme dans un rêve, les yeux ouverts; j'avais aussi le sentiment lointain de choses

<sup>1</sup> A. Sechelaye, "Les problèmes de la langue," *Revue philos.* 1917, t. II, pp. 16 et 17.

déjà vues...Sauf quelques mots, tels que: oui, non, merci, s'il vous plaît, je ne pouvais absolument rien dire ni écrire; *et non seulement je ne pouvais rien dire mais je n'avais rien à dire, en tant qu'expression de paroles. J'avais déjà toutes mes pensées, toutes mes conceptions; c'étaient mes symboles que je n'avais plus à ce moment.* Mais le sens ou l'intuition du mot ou de la lettre me restait comme le souvenir d'un écho lointain qui me rappelait la chose. *J'avais donc perdu la mémoire du mot, mais il me restait le souvenir de la place qu'il occupait*<sup>1</sup>.

Done, indistinction des éléments psychiques, avec impression d'état de rêve, conservation complète de la pensée intuitive, sans images du moins verbales, conservation d'une certaine *articulation* (au sens étymologique du mot) de la pensée, car le malade avait le souvenir ou plutôt l'intuition de la *place des mots* sans avoir l'image verbale de ceux-ci, telles sont les remarques essentielles du malade sur son propre état. Dès le début donc il nous avertit explicitement de l'erreur de ceux qui, comme Moutier, identifient pensée et langage.

Au point de vue fonctionnel, le Dr Saloz insiste aussi immédiatement sur la conservation intégrale de sa volonté, s'efforçant de récupérer l'état normal:

Souvent, écrit-il, je repense aux incidents de ma brusque attaque suivie d'aphasie subite, et je suis arrivé à cette constatation que le phénomène *psychologique* qui a prédominé chez moi au début de ma maladie, dans l'intimité même de mon cerveau, a été un désir et un besoin impérieux de rechercher les éléments de toutes sortes que j'avais le sentiment d'avoir perdus sans l'espoir peut-être de pouvoir les retrouver: recherche angoissante de la chasse à mes idées et à mes conceptions, recherche de mes sentiments et de mes sensations cérébrales, recherche de mes éléments verbaux, lecturiers et graphiques....Or, le phénomène essentiel de cette recherche est toujours, quoiqu'on en dise, un phénomène de *volonté*....Ces retrouvailles comptent certainement parmi les plus grandes satisfactions et je dirai même les plus grandes voluptés cérébrales qu'un aphasique comme moi puisse goûter, car elles sont basées essentiellement sur le sentiment d'un effort effectif satisfaisant accompli par la volonté dans des conditions de recommémoration cependant souvent très difficiles à enregistrer<sup>2</sup>.

C'est là, croyons-nous, un phénomène très caractéristique, que nous retrouvons également noté avec soin dans l'auto-observation du Prof. Forel. Cette conservation intégrale et même cette exaltation de la volonté est en contraste absolu avec les états d'affaiblissement intellectuel étudiés dans d'autres domaines de la neuro-psychiatrie (paralysie générale, schizophrénie, sénilité cérébrale, etc.). Elle nous permet, à elle seule, d'affirmer que si, au cours de l'aphasie, il y a un affaiblissement intellectuel, il est certainement d'un genre tout particulier et n'a d'analogue dans aucun autre cas pathologique.

<sup>1</sup> *Loc. cit.* p. 10.

<sup>2</sup> *Loc. cit.* p. 11

En ma qualité d'ex-aphasique ayant en la chance de pouvoir récupérer une partie des éléments de mon entendement antérieur, je pose en fait et sans risquer d'être contredit par tout neurologue un peu expérimenté en cette matière, que, par le fait même de la maladie qui a produit l'aphémie, l'aphasique est entaché, d'une manière générale, d'une diminution plus ou moins forte de son intelligence, mais que cette diminution n'est que relative à son état antérieur et nullement à celle d'un homme normal doué d'une intelligence banale ordinaire....*Je fais remarquer à ce propos que je ne parle que d'intelligence, et nullement d'instinct et surtout d'intuition*<sup>1</sup>.

L'auteur, qui n'est pas psychologue, ne nous donne malheureusement pas autant de détails que nous en désirerions sur ce point, le plus important à notre point de vue, puisque, s'il était élucidé, il pourrait nous apporter des indications sur la nature de la pensée privée de son expression symbolique chez l'aphasique. Le fait, cependant, que le malade parle de conservation de *l'instinct* et de *l'intuition* doit nous retenir. Ce qui paraît, en effet, caractériser le psychisme de l'aphasique, c'est son absence de *différenciation*, de *discrimination*. Privé du soutien matériel de l'expression verbale, c'est-à-dire du secours de la motricité, il n'y a plus possibilité pour le sujet d'opposer nettement un concept à un autre:

Il y a des moments, dit le Dr Saloz, où j'ai le sentiment d'une espèce d'interférence ou d'une polarisation de mes *idées*, c'est-à-dire que leur choc me fait l'impression, au lieu de me les éclairer, de produire au contraire, dans leurs éléments, une obscurité partielle, naturellement au point de vue psychologique s'entend. J'ai le sentiment à ce moment-là qu'il existe des espèces de lacunes ou des trous passagers dans mes conceptions, avec un sentiment *impérieux* d'être comblés d'une façon quelconque pour émerger de nouveau de l'obscurité à la lumière<sup>2</sup>.

Dans des recherches récentes poursuivies avec la méthode de l'école de Wurzburg sur des aphasiques blessés du cerveau, Lotmar (de Berne) a montré que la difficulté considérable, attribuée classiquement à l'amnésie, que les sujets éprouvent à actualiser certains mots abstraits, provient de ce que chez eux la pensée se présente sous forme de complexes indécomposables ou de ce que, en même temps que le mot juste, surgissent des phénomènes intermédiaires (*Zwischenerlebnisse*), soit sous forme de représentations, soit sous forme de mots<sup>3</sup>. M. Head a fait la même remarque que plus la phrase est abstraite, plus facilement le malade se trompe. Nous avons là, croyons-nous, au point de vue pathologique, la confirmation de la théorie des *valeurs oppositives*, qui constitueraient, d'après F. de Saussure, l'infra-structure du langage.

<sup>1</sup> *Loc. cit.* pp. 24-25. Souligné par nous.

<sup>2</sup> *Loc. cit.* p. 25.

<sup>3</sup> Lotmar, "Zur Kenntnis der erschwerten Wortfindung u. ihrer Bedeutung für das Denken des Aphasischen," *Archives suisses de neurol. et de psychiatrie*, t. v, fasc. 2, et t. vi, fasc. 1 (1920).

L'instinct ou l'intuition sont, par contre, étrangers à toute *fonction de découpage*, à toutes catégories analogues à celles de l'intelligence. Sans doute, nous ne voulons pas rouvrir ici le si intéressant débat qui a eu lieu en juillet 1919 sur le problème de l'*instinct* et de l'*intelligence*, dans la séance commune de l'*Aristotelian Society*, de la *British Psychological Society* et de la *Mind Association*; nous nous permettrons seulement de remarquer: (1<sup>o</sup>) que l'expression d'*instinct* est celle même employée par le malade pour caractériser son activité psychique résiduelle; nous ne faisons donc qu'enregistrer le résultat de son auto-observation; (2<sup>o</sup>) que la notion d'*instinct* ne doit évidemment pas être entendue ici dans le sens étroit d'*actions instinctives*, mais doit être entendue dans le sens de *dispositions, tendances instinctives*, ainsi que l'admet R. Brun pour les animaux supérieurs et l'homme<sup>1</sup>; (3<sup>o</sup>) que l'opposition globale et volontairement schématique de l'*instinct* et de l'*intelligence*, quoique niée par d'illustres naturalistes, n'est pas une thèse purement philosophique. Nous nous permettrons de rappeler, en passant, que les idées de M. Bergson à ce sujet ont été adoptées par un spécialiste de la biologie des insectes, comme M. Bouvier<sup>2</sup>.

Rappelons-nous, maintenant, le malade de Van Woerkom, chez lequel nous avons cru apercevoir que les troubles aphasiques n'étaient qu'un cas particulier d'un trouble plus général, quoique bien spécifique, de l'intelligence. Il savait le nom de ses enfants, sans pouvoir en indiquer le nombre, il appréciait qualitativement, à l'aide de comparaisons, les coups qu'on donnait sur la table; il connaissait individuellement les jours de la semaine et les mois de l'année, etc.; *toute représentation de rapports géométriques ou arithmétiques était absente de chez lui*. De même nous avons attiré l'attention sur la difficulté énorme qu'éprouvait le Prof. Forel à exécuter les moindres opérations arithmétiques. Il est évident, que, dans ces cas, que ce soit ou non par l'intermédiaire du langage intérieur, il y a une atteinte relative de l'intelligence, *sensu stricto*. A ce point de vue, nous pensons que la pathologie nous autorise à accepter la conception que M. Bergson a donnée de cette fonction, en s'appuyant sur les principes de la biologie générale: "*Si l'on envisage dans l'instinct et dans l'intelligence ce qu'ils renferment de connaissance innée, on trouve que cette connaissance innée porte dans le premier cas sur des choses et dans le second sur des rapports*<sup>3</sup>."

<sup>1</sup> R. Brun, "Das Instinktproblem im Lichte der modernen Biologie," *Archives suisses de neurol. et de psychiatrie*, t. VI, fasc. 1 (1920).

<sup>2</sup> Cf. Bouvier, *La vie psychique des insectes*, Paris, Flammarion, 1918; en particulier ses conclusions.

<sup>3</sup> Bergson, *L'Évolution créatrice*, 2<sup>ème</sup> éd. 1907, p. 161.



Or, comme l'a bien montré l'auteur que nous venons de citer, d'accord en cela avec les résultats les plus récents de la linguistique, la prise de conscience de ces *rapports* n'est guère possible que par le langage. Avec celui-ci et avec la mobilité du mot, la *fonction de découpage et d'opposition de l'intelligence* entre en action. Celle-ci et son œuvre, la science, sera d'ailleurs d'autant plus développée que la combinaison seule des symboles exprimeront des rapports de plus en plus subtils. Le résultat sera la *distinction* et la *clarté*.

Dans ces dernières années, on a relevé, non sans raison, croyons-nous, les analogies existant entre certains états de dissolution de l'esprit et le stade de l'évolution auquel en sont resté certains peuples. Quoique la plus grande prudence soit nécessaire dans ces rapprochements, on ne peut pas ne pas être frappé du parallélisme existant entre l'état d'une langue, à un moment donné, et la qualité (ce mot n'impliquant dans notre pensée aucun jugement de valeur) des produits de l'*intelligence* de ceux qui la parlent. Remarquons bien, encore une fois, que nous disons : *intelligence*, et non *pensée*.

A ce propos les études toutes récentes de M. Granet sur "*Quelques particularités de la langue et de la pensée chinoises*<sup>1</sup>" nous paraissent d'un intérêt tout particulier pour la question qui nous occupe : "Tandis qu'un Français, par exemple, possède, avec sa langue, un merveilleux instrument de discipline logique, mais doit peiner et s'ingénier s'il veut traduire un aspect particulier et concret du monde sensible, le Chinois parle au contraire un langage fait pour peindre et non pour classer, un langage fait pour évoquer les sensations les plus particulières et non pour définir et pour juger, un langage admirable pour un poète ou pour un historien, mais le plus mauvais qui soit pour soutenir une pensée claire et distincte. En fait, quand on lit les plus authentiques penseurs chinois, Tchouangtseu, par exemple, ce qui frappe, c'est un goût extraordinaire pour l'expression concrète, c'est une prodigieuse virtuosité plastique et musicale<sup>2</sup>." Il semble que, dans ce cas, l'esprit procède par intuitions et combinaison d'intuitions ou, même, par une espèce d'analyse d'ordre intuitif. M. Granet a fait ressortir l'analogie de cette pensée symbolique où le rythme joue un grand rôle, avec la musique, où tout est *indifférenciation*, où les sentiments exprimables, d'une façon nette, sont en réalité très peu nombreux.

Remarquons également que ce qui fait l'impuissance de la langue et de la pensée chinoises en matière scientifique, c'est le fait que presque

<sup>1</sup> Cf *Revue philosophique*, en particulier la partie publiée dans le n° de mars-avril, 1920.

<sup>2</sup> Cf *Revue philosophique*, mars-avril, 1920, pp. 184 et 192.



chaque mot est attaché à un fait particulier. Or, en partant de considérations bien différentes de celles que nous faisons ici, M. Bergson n'a-t-il pas écrit: "*Le signe instinctif est un signe adhérent, le signe intelligent est un signe mobile*"<sup>1</sup>?

Remarquons aussi combien il serait intéressant de posséder des observations précises de cas d'aphasie chez des individus cultivés de races différentes de la nôtre; cette neurologie comparée, dont Brodmann demandait l'étude systématique au point de vue de l'architectonique cérébrale, est encore à peu près inexistante.

\* \* \*

Jusqu'ici, remarquons-le, nous avons pu, nous plaçant sur le terrain de la psychologie fonctionnelle, parler des troubles aphasiques sans parler d'*images verbales*. Est-ce à dire que nous en nions l'existence, car, si étrange que cela puisse paraître, cette opinion a été soutenue? On ne saurait aller contre les données de l'observation interne. Le problème est, en effet, d'une importance capitale pour le problème de l'aphasie. D'une part, en effet, il pose la question de la notion de localisation cérébrale des phénomènes psychiques, question dont nous considérons la solution comme étant en train de se faire à l'heure actuelle; nous avons décidé de ne pas nous en occuper ici. D'autre part se pose le problème de savoir si, dans l'*aphasie motrice*, il s'agit d'un trouble particulier de l'articulation (l'*anarthrie* de P. Marie) ou d'un phénomène plus proprement intellectuel. M. Head vous a exposé, avec la pénétration de pensée unie à une expérience clinique des plus étendues, qu'il adhérait à cette dernière hypothèse en ce sens que, contrairement à ce que soutient M. P. Marie, le langage intérieur est atteint. Elle trouve une confirmation des plus explicites, comme nous l'avons vu, dans l'auto-observation du Prof. Forel ainsi que dans celle du Dr Saloz, à laquelle vous me permettrez de recourir encore comme à la source des données immédiates de la conscience d'un aphasique:

La majorité des auteurs qui se sont occupés d'aphasie ont une tendance à croire que le phénomène qui joue le principal rôle dans l'aphasie dite motrice ou d'expression, est une opération psychologique consistant essentiellement dans un défaut de la mémoire du mécanisme lui-même de la lettre ou du mot extériorisé. Je crois que ces dits auteurs font une confusion entre les phénomènes dysarthriques en général et ceux de l'aphasie motrice proprement dite, dans laquelle c'est l'oubli de l'*idée* même du mécanisme articulaire qui prédomine. Ces auteurs ont l'habitude de dire à ce sujet que l'aphasique moteur conserve son langage intérieur, mais que c'est sa faculté motrice d'extériorisation *seule* qui lui manque, sans se douter que le premier degré de cette opération psychologique incorrecte réside justement dans un déficit de la

<sup>1</sup> *Loc. cit.* p. 172.

mémoire de l'idée du symbole lui-même, et par conséquent dans une altération de sa sensibilité, quels qu'en soient du reste ses éléments primordiaux antérieurs<sup>1</sup>.

Cette constatation vient tout à fait à l'appui des idées de M. Head, et permet certainement de se représenter le phénomène comme une déficience de la *pensée symbolique* (symbolic thinking). Remarquons-le, cependant, c'est là un point de vue de *psychologie structurale*, dont nous ne contestons nullement la légitimité, mais qui ne permet pas, semble-t-il, de considérer le problème du point de vue biologique. Dans ce but, certains auteurs (M. de Monakow en particulier) ont trouvé un avantage incontestable à employer le langage objectif de Semon; pour eux, il s'agit, dans les phénomènes présentés par les aphasiques, d'un trouble fondamental de l'*ecphorie des engrammes*. Mais cette expression est un peu vague, parce que le sens du terme d'*engramme* est par trop indéterminé quand il s'agit de phénomènes aussi complexes. Nous ne nions pas cependant qu'il constitue un grand progrès sur la terminologie plus subjective de la clinique traditionnelle. Nous sommes ainsi amenés à nous demander s'il ne serait pas possible de se représenter les phénomènes en termes de mouvements? Par là nous suivrons la méthode générale qui est en germe dans l'œuvre de Hughlings Jackson lorsqu'il écrivait en 1876: "Les opérations mentales ne doivent être, en dernière analyse, que les côtés subjectifs de substrata sensitifs et moteurs<sup>2</sup>."

Rappelons-nous de l'insistance avec laquelle le Dr Saloz essaie de rendre, à l'aide de multiples métaphores, le fait qu'il n'avait plus *la libre disposition de son énergie nerveuse*. Il remarque, par ailleurs, la variabilité de ses troubles aphasiques d'un moment à l'autre, et, en particulier, le matin. A ce sujet, nous nous souvenons d'un de nos malades qui, pour traduire le même phénomène, parlait de la *paralysie du repos*, comme si l'exercice augmentait la perméabilité (*Bahnung*) des voies nerveuses. Enfin, il est très remarquable de noter qu'objectivement aussi bien que subjectivement, c'est par l'*esquisse d'un phénomène moteur d'articulation* que débutait l'apparition du mot:

Au début, sous le rapport de la lecture, je n'avais pas encore le mot ou la lettre, qui ne me disaient rien du tout, mais j'avais le sens du mot ou de la lettre, ou le sentiment intuitif que j'avais la place pour le ou la mettre, c'est-à-dire en puissance, comme si j'avais un écho interne lointain qui me revenait en me les rappelant et qui m'avertissait qu'ils allaient venir; mais ce n'était pas sans de grands efforts de pensée et souvent vainement. C'étaient comme des voix intérieures qui m'avertissaient comme par une sorte d'extériorisation anticipée des expressions du langage parlé. J'ai fait la même observation pour la lecture à voix basse (chuchotement), et d'une façon

<sup>1</sup> *Loc. cit.* pp. 33-34.

<sup>2</sup> Cf. *Clin. and Physiologic. Research on the Nervous System*, 1876.

beaucoup plus prononcée, c'est-à-dire que j'en ressentais un besoin impérieux. Ma famille a pu constater le fait, attendu qu'on m'entendait très bien essayer de chuchoter la lettre ou le mot avant de l'exprimer à haute voix d'une façon effective<sup>1</sup>.

D'une manière plus générale même, le Dr Saloz a constaté que ses phénomènes aphasiques étaient en rapport avec l'hémi-parésie droite qui avait suivi l'ictus. Le malade parle, il est vrai, de *parésie* de la sensibilité; nous ne croyons pas qu'il faille entendre cette expression autrement que dans le sens d'un trouble des sensations kinesthésiques, le sujet disant un peu plus loin qu'il a toujours eu conscience d'un affaiblissement notable du sens musculaire du côté droit:

Immédiatement après mon attaque, j'ai constaté, comme je l'ai déjà dit dans mon journal, une *parésie* très prononcée de la sensibilité de tout mon côté droit, de la tête aux pieds. Ce symptôme très pénible a diminué progressivement, mais avec des fluctuations journalières provenant d'une foule de circonstances, souvent capricieuses en apparence, mais dans lesquelles j'ai toujours constaté une concordance remarquable de mes sensations pathologiques, *surtout au point de vue de l'élaboration plus ou moins difficile des éléments de ma parole...* J'ai eu constamment le sentiment, même au plus fort de ma maladie, que mon aphasie avec amnésie de la parole et de l'écriture, avec tous ses dérivés psycho-métaphysiques, a toujours été en corrélation avec ma parésie hémianesthésique associée à cette impression réitérée que les circonvolutions de mon hémisphère gauche étaient bourrées de coton. Je crois d'autre part qu'il faut rattacher ma parésie hémianesthésique au sentiment que j'avais d'une espèce d'insensibilité *cérébrale* générale qui se faisait remarquer dans de multiples phénomènes que j'aurais beaucoup de peine à détailler séance tenante, mais qui s'exprimaient aussi bien au point de vue matériel et organique, qu'au point de vue psychologique et intellectuel<sup>2</sup>.

*Tout se passe comme si le phénomène élémentaire était un trouble de la circulation de l'énergie nerveuse.* Ce phénomène est fréquent en pathologie nerveuse, fondamental même à notre avis, mais nulle part il n'est plus facile à observer qu'au cours de l'aphasie. Rien n'est plus variable, comme il est facile de s'en apercevoir, en multipliant les examens, aux diverses heures de la journée, que le comportement d'un sujet atteint d'un trouble de la *pensée symbolique*. Ce dernier, même, s'il s'agit d'un homme au cerveau encore jeune et porteur d'une lésion qui ne provoque pas une *diaschise* trop étendue, n'est pas toujours exactement comparable à lui-même au cours du temps, si les influences externes (fatigue, émotions, etc.) viennent à varier. Quelle que soit l'interprétation qu'on donne du phénomène, on ne peut pas ne pas être frappé de l'importance de la *mise en train* (mouvements naissants des muscles phonateurs, chant, scansion) en particulier chez les sujets atteints de la forme dite: *aphasie motrice*. Avec sa pénétration habituelle,

<sup>1</sup> *Loc. cit.* pp. 12-13.

<sup>2</sup> *Loc. cit.* pp. 22-23.

Hughlings Jackson avait rapproché la parole articulée de l'acte moteur volontaire. Or, bien plus tard, Brailsford Robertson a fait remarquer, à propos de celui-ci, qu'il existe, soit dans le tissu nerveux central, soit dans le système neuro-musculaire périphérique, une résistance analogue au frottement et qui exige un effort donné pour céder et pour laisser la réaction se faire. Les choses se passent exactement comme pour un corps pesant placé sur le plan incliné: il ne commence à se mouvoir que lorsque l'inclinaison du plan a atteint un certain degré. Nous serions tenté de dire, pour continuer la comparaison, que, chez l'aphasique, l'inclinaison du plan est fonction de la libre circulation de l'énergie nerveuse.

Nous savons que celle-ci s'extériorise sous forme de contractions des muscles phonateurs; mais, nous ne saurions trop y insister maintenant, il semble bien qu'au cours des phénomènes aphasiques, il s'agisse de complexes psycho-moteurs plus hautement spécialisés et dont le champ d'action n'est nullement, de façon exclusive, les muscles phonateurs. Sans doute, le jeu de ceux-ci est le plus apparent, mais il n'est certainement pas le seul. Ainsi que nous l'avons vu, en relatant les observations de Van Woerkom, et comme le montre certaines des épreuves imaginées par M. Head, l'aphasique présente des troubles de la spatialité qui, pour n'être pas apparents à un examen portant uniquement sur la fonction du langage, n'en sont pas moins très importants; il nous a semblé que ceux-ci constituaient un trouble général portant sur la *fonction de découpage et d'opposition*, dont l'aphasie ne paraît être qu'un cas particulier.

Nous en arrivons ainsi à considérer, d'accord en cela avec M. Head, que, même dans le cas de l'aphasie motrice, il n'y a pas d'*anarthrie*, au sens étymologique du mot, mais que le *découpage et l'opposition* qui interviennent normalement dans le fonctionnement de l'*intelligence* ne peut plus se faire, parce que l'*attitude psycho-motrice* complexe, qui est le substratum objectif du processus, n'est plus en mesure de se faire. Cette hypothèse a, croyons-nous, quelques avantages.

D'une part, en effet, elle est bien en accord avec ce que l'anatomie comparée nous apprend sur l'origine et la fonction du cortex. Rappelons-nous ici les savants travaux d'anatomie comparée de M. Elliot-Smith. Mais, surtout, c'est à une autre partie de l'œuvre de M. Head, à celle qui a trait à la participation respective de l'écorce et du thalamus dans les phénomènes de sensibilité, que nous sommes redevables d'une connaissance plus approfondie des caractères de l'activité corticale. Or n'a-t-il pas montré que la *discrimination*, la *différenciation*, le *découpage*



en un mot, étaient caractéristiques de l'activité corticale, tandis que l'indifférenciation, le caractère diffus, qui est une qualité attachée aux phénomènes affectifs, était caractéristique de l'activité thalamique? Si nous nous reportons à ce que nous avons déjà dit, nous aurions été tentés, si nous n'avions craint tout d'abord de ne point nous faire comprendre, de remplacer l'expression d'*instinct* par celle d'*activité thalamique*. Rappelons-nous aussi que la dissolution de certains des processus les plus élevés de l'activité cérébrale provoque l'apparition d'un état d'*hyper-réaction affective* bien connue de tous ceux qui ont étudié les aphasiques. M. Drever n'a-t-il pas soutenu, par ailleurs, que l'instinct est non seulement lié à l'activité, mais à l'émotion?

Ce n'est pas sans une légitime satisfaction qu'en prenant connaissance du mémoire de M. Head, nous avons trouvé ce rapprochement du langage et de la fonction spatiale du cortex, que l'étude de ses travaux antérieurs nous avaient suggéré: "La ligne suivant laquelle les centres supérieurs du cerveau progressaient se manifestait par l'augmentation du pouvoir de distinguer les variations d'intensité, de similitude et de différence et les relations dans l'espace. A cela fut ajouté le langage, qui, à part ses côtés le rattachant aux émotions, sert à exprimer ces relations. Des symboles définis, comme les mots et les nombres, furent inventés pour enregistrer ces attributs." M. Head se sépare, par contre, de notre point de vue plus uniaste, car il ajoute: "Mais ce ne sont pas les seuls facteurs qui peuvent être touchés dans les troubles de la pensée symbolique et de l'expression<sup>1</sup>." N'est-il pas caractéristique, d'autre part, que certains auteurs, comme M. de Monakow et son école, en arrivent à désigner l'activité corticale globale du terme de *spatialité*?

Ce qui montre bien, d'ailleurs, que, dans l'aphasie, les phénomènes intéressants à nos yeux les organes de la phonation sont secondaires; c'est que la haute spécialisation des innervations musculaires (*mélodies kinétiques* de M. de Monakow) que nous constatons dans le langage, peut se réaliser en dehors de celui-ci. Sans parler de la mimique et du geste, sur la signification desquels il serait trop long de nous étendre, l'exemple des sourds-muets est banal. Sans doute il n'est plus guère donné, aujourd'hui, d'observer des sourds-muets à développement cérébral normal, en raison de la perfection des méthodes d'éducation phonétique. Nous avons cependant connaissance d'une observation du Prof. Grasset, où la paralysie du bras droit était assez incomplète pour ne pas expliquer à elle seule l'impuissance où était le sujet de *parler* avec sa main droite le langage habituel des sourds-muets.

<sup>1</sup> *Loc. cit.* pp. 160-161.



Sans doute ce cas n'est pas aussi intéressant, en raison de l'âge du sujet et du caractère peut-être diffus des lésions, que les observations faites sur des blessés du cerveau, jeunes et résistants, mais il n'en reste pas moins que les troubles observés sont exactement superposables à ceux des aphasiques ordinaires:

Si on lui dit de réciter avec sa main droite l'alphabet des sourds-muets, il commence, essaie, fait péniblement l'*a*, plus péniblement le *b*, essaie vainement le *c* et y renonce, impatienté. Alors avec sa main gauche, il dessine tout l'alphabet avec autant de vitesse que d'exactitude.

De même si on lui montre des lettres et qu'on le prie de les lire tout haut, il essaie inutilement de le faire avec sa main droite, mais le fait correctement avec sa main gauche<sup>1</sup>.

Il est donc bien réellement aphasique de la main droite, dans la vraie et seule acception du mot. En même temps, il est agraphique. Autrefois, il écrivait, paraît-il, fort bien. Aujourd'hui il ne peut plus. Il ne veut même plus essayer, convaincu qu'il est de son impuissance qui l'humilie et l'impatiente. Et les deux impotences ne sont pas justifiées par la paralysie du bras droit...<sup>2</sup>

Il est regrettable, pour la question qui nous occupe, que nous ne possédions pas, à notre connaissance du moins, d'autres cas de ce genre étudiés avec une technique plus approfondie. C'est pourquoi nous n'en retiendrons ici qu'un seul point, c'est que la haute différenciation des innervations musculaires n'a pas d'appareil d'élection pour l'extériorisation du langage. Ce qui est essentiel (et le cas des sourds-muets est typique à cet égard) c'est, si nous pouvons nous exprimer ainsi, l'existence d'une fonction d'innervation psycho-motrice permettant à la pensée de se fractionner. Tout se passe comme si l'intelligence était un mouvement discontinu, qui se fractionne à divers degrés et suivant divers modalités. Elle ne paraît pas pouvoir fonctionner sans être pour ainsi dire sous-tendue non par le langage (ce qui est un cas particulier) mais par un mouvement de même forme générale, sinon réalisé, du moins esquissé. C'est pourquoi l'absence du langage phonétique n'est nullement une raison, du moins pour les vertébrés supérieurs, de poser à priori l'impossibilité de quelque chose ressemblant à l'intelligence humaine chez les animaux.

Par là nous entrevoyons comment la théorie de l'aphasie rejoint la physiologie générale du système nerveux, mais ici une remarque capitale est nécessaire. C'est artificiellement que nous avons parlé jusqu'à

<sup>1</sup> En ceci, de même que pour la récitation des lettres, ce malade est évidemment totalement différent des aphasiques ordinaires qui n'ont qu'un seul appareil effecteur à leur disposition.

<sup>2</sup> Grasset, "Aphasie de la main droite chez un sourd-muet" *Progrès médical* 31 octobre 1896.

maintenant de la fonction du langage en général. Comme l'a bien exposé de Monakow, reprenant un point de vue exprimé cliniquement par H. Jackson, c'est ici que la théorie de la *localisation chronogène* trouve sa plus intéressante application. Dans l'individu comme dans la race, primitivement les organes utilisés pour la phonation servent presque exclusivement à la nutrition et à la respiration. Peu à peu, au cours de l'évolution phylogénique et ontogénique, ces mêmes organes, pour pouvoir servir à l'expression de la parole, ont acquis de nouvelles formes de mouvements infiniment plus différenciés. Ceux-ci sont représentés au niveau du cortex sous forme de *mélodies kinétiques*, et non pas exclusivement au niveau de l'operculum rolandique et de l'operculum frontal. C'est en ce sens seulement que, d'après de Monakow, on peut parler de *centres* phylogénétiquement plus jeunes, dont l'organisation physiologique est encore aujourd'hui très obscure. Ayant particulièrement en vue ici la question générale des rapports du langage et de l'intelligence *sensu stricto*, il n'est pas inutile de faire remarquer que ce sont naturellement les degrés supérieurs du langage, ceux qui sont généralement atteints en premier lieu par la *dissolution*, que nous avons constamment envisagés.

A ce stade nous avons vu qu'il est absolument impossible, comme P. Marie l'avait remarqué au point de vue clinique mais sans précision psychologique, de séparer les troubles du langage d'un trouble plus général, plus étendu de l'activité corticale tout entière. D'un côté comme de l'autre, c'est l'absence de différenciation, de découpage, d'opposition qui nous a frappé. Envisageant ensuite le problème du point de vue moteur, sans avoir jamais eu à nous occuper des *images*, ce sont des complexes moteurs dont la différenciation avaient subi la même atteinte que nous avons été amenés à envisager.

Il n'entre pas dans nos vues d'étudier le détail des phénomènes, qui constitue un monde; il nous suffira d'avoir montré d'une part que, *dans ses éléments différenciés*, intelligence et langage étaient en union intime—parce que tous deux coulés dans le même moule—mais qu'au delà, la vaste région de la pensée, nous voulons dire de l'intuition, de l'instinct et de la volonté, non seulement restaient intacts dans l'aphasie à lésions circonscrites mais acquéraient, pour ainsi dire, un renouveau de vie. Il semble bien que ce soit ce dernier phénomène qui permette de se rendre compte du fait que beaucoup d'aphasiques peuvent continuer à vivre dans leur famille. La distinction capitale des deux genres d'activité psychique nous paraît fondamentale quand on tente d'évaluer le *niveau mental* des aphasiques.

Et cependant, arrivé au terme de ce travail, nous avons pleine conscience de l'insuffisance de nos analyses grossières au regard de la complexité des faits. On nous excusera en songeant aux obscurités naturelles de beaucoup de passages de l'auto-observation du Dr Saloz, qui, pourtant, parlait, lui, de son *aphasie vivante*.

## AN OUTLINE OF THE IDEA OF REBIRTH IN DREAMS

BY MAURICE NICOLL<sup>1</sup>.

THE idea of rebirth is practically universal in religions, however primitive. In this paper I am going to try and bring home to you the idea that the motive or theme or myth of rebirth is universal, because it lies in the human unconscious and still continually appears in dreams. From practical experience in analysis, I would go so far as to say that the rebirth theme is the very basis of our psychical life. I believe that in human psychology is embodied a dynamic principle which appears under the alternating symbols of death and resurrection, and that it is ultimately for this reason that neurotic conflict and neuroses and all psychological unhappiness exist. In other words the psyche is not designed to be stationary, and if we seek to be static, and to cling to outlived values in ourselves we must inevitably suffer, because we shall be at war with a principle *in* ourselves—not outside ourselves, although we may see it only so.

Whenever an entirely new attitude enters into a person's life, psychological rebirth to some extent has occurred. There are certain periods in life when certain biological transformations seek to come. They come from within as forces. The period of puberty is an example. For some time before puberty has actually expressed itself, there are movements of energy in the unconscious, and characteristic dreams. I mean that the coming function still lies in the unconscious and appears under a symbol—as, for example, under the symbol of the dark snake, the wound, the bull, or the unknown, earthy, rough and alarming stranger. Puberty may then come about in the body, but remain unexpressed for years in the psychology, in which case the psychological energy or libido belonging to this function will continue to appear as the snake or earthy and alarming man, and in many other ways, in dreams. For a symbol is energy in the unconscious. Now this is repression of what is growing up from below—not repression of the past, but repression of the future. Elsewhere I have called this non-expression. It is repression of the normal psycho-biological growth. It is not repression of what has been

<sup>1</sup> Read before the Medical Section of the British Psychological Society, June 23, 1920.

experienced but repression of what has yet to be experienced. We can understand that the new energy coming up from below, from the unconscious, may strike against a hard crust of conscious and rigid values and so be unable to get through. Birth of the new energy is then made impossible, and the result may be neurosis, or the first bias to neurosis.

At different ages there are different tasks, and our attitudes should change. Now, if we look at the dream from the dynamic point of view, we see apart from its cathartic value that it contains what is germinal. If we look at embryonic development we find, before the perfect organ appears, many preparatory stages of that organ. In exactly the same way we find, before the perfect function appears, many preparatory stages of that function in the unconscious. Now, there are dreams that deal with normal sexual growth. Some of these dreams are so characteristic that we might call them myths. There is in my opinion a dream-myth for every period of life, and a myth-cycle for life itself. There are myths that deal with normal sexual growth. There are also, at a later stage, myths which deal with normal sexual involution. In my experience there is a psychological menopause which precedes by some years the actual menopause in women. The dreams in this stage of life tend to be all of a certain kind—unlike the dreams of puberty. These dreams are very complicated and it is impossible to understand them in the form in which they are dreamt without reference to mythology and the psychology of primitives.

Broadly speaking, these dreams that women have at the psychological menopause always involve the understanding, and the acceptance or refusal, of a new attitude: which if accepted leads to an easier future. There are certain very critical points in life and at these points new attitudes are very necessary, and the myth in the unconscious changes. I would say that in men the age of about thirty-three to thirty-seven is one that is very important. The dreams that come during this time are quite characteristic and do not, in my experience, come at any other time. It would seem that the unconscious has a certain attitude at this period of a man's life which tends to lead him in a certain direction. He comes to a cross road. If he does not take a new direction then he may lay down the foundation for eventual neurotic trouble. It will be seen that from this aspect neurotic trouble means that we have not followed our myth. The idea that life must be a series of inner changes and not a stubborn inflexible unvarying course is perhaps new to some. We have the idea of change, however, expressed concretely in those old ideas that man renews his body every seven years. In women



I would put the age of about twenty-eight, particularly for unmarried women, as one of great importance—as important as that period which I have just stated concerning men. Now, whenever a critical point in life is reached certain symbols appear which deal with the idea of a rebirth to new attitudes and to the new myth for the next phase of life.

Whenever we have a new attitude or function forming itself in the unconscious and we hesitate to go down into the depths to meet it, but cling to our old attitudes, then we add a bias towards neurosis, in place of adding to ourselves a new understanding. But if we do go down to meet it, we experience a minor or major rebirth.

At those ages in the life of men and women which are critical, rebirth symbolism is regularly found in the dream, so far as my experience goes. It is perhaps to be expected that in world-periods of transition, such as the one we are now in, when the interpretation of life is becoming more obscure and therefore a more personal matter, rebirth dreams should be more general. But of that we can have no proof.

Rebirth is expressed by the unconscious in as many ways as it is in mythology. The dream may contain all the main motives; or only express a few. Jung has given us the main movements in the theme from a psychological standpoint in his *Psychology of the Unconscious*. There is first of all the movement *towards or into the mother*. This is an expression for the movement of the libido, seeking new values or rebirth, going into the unconscious. It is expressed in mythology, ritual or religion in symbols such as Jonah going into the whale's belly, Christ going into the heart of the earth, the initiate in the cave or lying in the grave, the knight sleeping naked before the altar, the hero travelling in the interior of the monster under the sea towards the west, etc. After varying adventures, the hero reappears with renewed or divine strength, in the east.

The symbols refer to the entrance into the womb. Reductively considered, this movement of the libido, whenever it occurs in the course of a person's life means a movement towards the mother. This can easily be given a concrete expression as an incest-wish, relating to the objective mother. As you know, this movement of the libido has found such an interpretation. It is perfectly valid as it stands, provided the second and third acts of the drama of rebirth are ignored, and beyond all doubt we find continually this movement of libido to the mother in the dreams of the neurotic. We can say therefore that in the unconscious lies an incest-wish. But this view is horizonless; it blots out the ultimate meaning of the movement, which is an attempt at healing, or *regenera-*

tion. I must remind you that in so far as the neurotic fails to be reborn, his libido, seeking rebirth, will remain striving towards the mother. We might be content to take the mother concretely, because this is often a help in making the analysis effective in the early stages, but it would not do away with the psychological meaning of the mother—that is, as a symbol of the unconscious, of the re-creative psychological womb, where energy enters in and finds a new germinal attitude to fertilize.

The ritual of rebirth is very common in primitive tribes at the age of puberty. The number of examples, from every part of the world, is almost endless. Among Australian tribes the following customs have been noticed. (1) A long hut is made in a lonely spot in the shape of a monster with a gaping mouth. The novice has to pass into this. He is swallowed up by it and then after various séances, he is released from the monster's belly. Circumcision follows. After a period he returns to his village, but he is now supposed to be reborn—that is, he is something new, and has forgotten his old attitudes. This idea is carried out by his not recognising the speech or faces of his relations, etc.

The monster is the womb, exactly comparable to the belly of the whale. There are still theologians, devoid of psychological understanding, who speculate about the particular fish in the Mediterranean Sea that swallowed Jonah. The ritual outlined above *externalises the psychological motive in the unconscious*. It satisfies the unconscious compulsion; for the dynamic racial myths lying deep in the human unconscious may exert compulsive force.

(2) After a tooth has been knocked out, the novice lies in a grave and is covered over by sticks and earth. He then 'comes to life,' performs a magic dance in the grave, and exhibits the magic substance he has got in his mouth from his rebirth, etc.

The grave again is the womb. The losing of something old may express the idea of rebirth in a negative way. The knocking out or losing of a tooth—a very common theme in dreams—and the act of circumcision both signify, in primitive custom, an initiation, and are associated with the ritual of rebirth. The psychological meaning is that before a new attitude can emerge, an old one must be lost.

Apart from primitive ritual, the idea of rebirth runs through folklore. For example the idea that sickness is cured by passing the sick person through a hole in a tree or through a narrow circle of wood or by wearing a certain kind of ring is a concrete expression of the act of rebirth—of being cured by entering and leaving the womb. It is the externalisation of a motive springing out of the human unconscious. When we externalise

or project the unconscious, we put the world of the psychological realities into the world of the concrete realities, just as the insane person does, and so confusion comes about and many strange customs.

Whenever we begin to see rebirth symbolism in dreams we must suspect the existence of a crisis, major or minor, in the history of the patient. I do not know how to speak about rebirth symbolism in dreams quite simply; it is something that is rather complicated. Let me remind you again that we can handle rebirth symbolism in two ways; we can trace it back to a desire to enter the mother's womb, as did Nicodemus, and say that it is an incestuous movement towards the objective mother; or we may say that it is a movement of libido towards the unconscious—that is, towards the creative mother-source of psychological being. This movement takes place when some new power for life is needed and at such a crisis the new function lies in the womb of the unconscious and the libido must go downwards to animate it. A period of introversion, and of in-going, must always occur before the new psychological birth can be brought into daily life. This is the second act of the drama. It is the lying in the 'womb.' Coincident with the rebirth dreams we may find the new function frequently represented as a little baby. The little baby in dreams is not always the new function; it has not always to do with the birth of the *individuality*—of psychological freedom. The little baby in dreams may also stand for the *infantility*—for psychological bondage. The associations are very important in telling the difference between the two, but sometimes we have to wait and let the unconscious develop its theme before we can be certain. Practically, the periods where the rebirth symbolism comes are of great importance in analysis, and unless the newly forming libido is successfully led forth the outlook will not be good. We can only destroy the infantility by developing the individuality. We can destroy nothing by a negation, by a negative gesture. The libido cannot be stamped out; it can only transform itself. The libido that goes to the infantility must be gradually brought into the sphere of the individuality.

The idea of going into the water as a symbol of rebirth is found in the widespread ritual of baptism. By immersion, by going into the water and emerging from it, the old is washed away and the new is born. It is an idea that is much older than Christianity. Here the water plays the same rôle as the tomb, the cave or the belly of the fish. It is the symbol for the psychological mother. The sea or the sea-shell is used as a symbol for the re-creative mother in ancient myths.

I will give you an example of the simplest rebirth dream that I can

find amongst my material. I have chosen examples in which the rebirth motive occurs clearly in the manifest content. The dream occurred in a young officer, in the early thirties, who was becoming rather neurotic. *He dreamt that he was on a steamer with a crowd of people. He suddenly dived over the side of the steamer and plunged into the sea. As he went down the water became warmer and warmer. At length he turned and began to come up. He reached the surface, almost bumping his head against a little empty boat. There was now no steamer, but only a little boat*<sup>1</sup>. He had no idea why he should have such a dream. In his associations he said that the water was about *blood-heat* at the depth at which he turned. As I have said, the idea of going into the water as a symbol of rebirth is found in the ritual of baptism. Baptism means a rebirth. But why should going into the water mean rebirth? Rebirth, concretely expressed, means a return to the womb. The sea is a symbol of the Great Mother. You will note that in my example the water is of *blood-heat*. This is a mythological expression used by the unconscious to indicate the idea of returning to the maternal depths, for a movement of the libido towards the unconscious in its aspect of the re-creative mother. You will see by the manifest content of the dream, *which is always of the utmost importance*, the *motif* of rebirth comes between two symbols, that of the steamer crowded with people and the little boat. Broadly speaking, this means that the dreamer must leave collective values, which are represented by the crowd on the steamer, and go through a process of rebirth whereby he comes to the little boat; that is, to something individual. Whenever we cease to live by purely collective values and begin to develop individual values for life we undergo a psychological rebirth, and rebirth symbolism begins to appear in the dreams.

I will give two further examples of dreams in which the rebirth *motif* is contained. In the case of a woman approaching the climacteric *she finds in her dream that she has to go somewhere she has never been before. She is taken to this place and discovers it to be a kind of Turkish bath. She is taken inside and placed in a small room not much larger than herself. The door is closed and the steamy heat gradually begins to increase. At the same time she observes that at the top of this small room there is a brilliant light. She feels she cannot stand the atmosphere and realises suddenly that she has taken in her fur coat with her, although she was warned not to do so. She escapes.* Here the idea of the womb is contained in the symbol of the small room, in which there is an increasing moist heat. This dream was one that occurred during what I term the psycho-

<sup>1</sup> This dream was recorded at the first interview.



logical menopause, which precedes the actual menopause by several years. The difficulty that this patient found in facing the alterations in her attitudes which were apparently necessary at this stage is shown by the dream. She cannot yet stand the process of rebirth, which she complicates by insisting on retaining the fur coat. A sacrifice of the instinctual (the fur coat) in favour of the intuitional (the brilliance) is the underlying theme that the dream deals with in this symbolism. I suppose that this idea of rebirth, of the libido becoming divided against itself, is at the root of the conflict between the different schools of analytical psychology. About the period when the most powerful rebirth symbolisms appear another kind of symbol is met with. It recurs continually in conjunction with rebirth *motifs*. It is the symbol of double personality. The dreamer dreams that he is two people. I am not referring to that 'familiar' with whom we are so constantly associated in dreams—that shadowy other person whom we never see, but who accompanies us often in our adventures and is our other-self. In the case of the symbol of double personality there is a distinct sense of being two people or of splitting into two people in the dream. "*I dreamt that I was two people,*" or "*I dreamt that I saw a person who was two people at the same time and yet it was the same person.*" Consider for a moment what the movement of rebirth means in the psyche of the individual. It means that he has to sacrifice himself to himself. He is at once a sacrifice and sacrificer. He thus becomes two personalities. In the Norse myth in which the god describes how he acquired his divine power the words occur "I know that I hung on the windy tree for nine whole nights, wounded with the spear consecrated to Odin, *myself to myself.*" Turning to another part of the world we find in the initiations of a Brahman two black antelope skins are used, upon which the initiate sits. This is symbolical of the inner situation which is supposed to arise at the time of the ritual. When consecrated the initiate becomes Vishnu, a god, but at the same time he is a sacrifice and the same person is the sacrificer; he is the god who sacrifices a god to a god—himself to himself. The black antelope skins have also the significance of the womb, being in certain variations of the ceremony wrapped round the initiate, thus forming an envelope. After this the initiate is proclaimed the twice-born or the spiritually born. You will understand how easily this *motif*, i.e. of rebirth, which according to my experience continually appears in dreams of people who are entirely unacquainted consciously with mythology or ritual, may be taken in a literal and objective way as a horizonless incestuous wish. Because the regenerating



aspects of the unconscious are so often represented by a striving towards the mother, they can easily be misinterpreted in terms of concrete reality instead of as a psychological reality.

The final example is more difficult; it belongs very much more to mythological themes. "*I was out in a field and a wolf came to me. He seemed to know me and caught hold of my wrist and tried to urge me to go with him. I went with him and we came to a grey rock through which we seemed to pass magically to the interior in which there were two caves. I remained in the outer cave, while the wolf went into the inner cave with me, because I was somehow two persons. I thought that the wolf was teaching something to this other person who was myself in the inner cave.*" This dream contains the idea of a major rebirth. More properly, it deals with the preparatory stages of a major rebirth. The going into the rock and the coming out of the rock are mythological themes. In myths the god is sometimes born out of the rock. The god Mithra is observed by the shepherds emerging from the rock. I must say a word here about the significance of the 'god' in mythology. Rebirth leads to the development of individuality and of psychological regeneration. This is one aspect of the 'god.' In the dream above the patient passes into the rock and there splits up into two personalities and one of these is related to the wolf, who appears to be teaching it in the inner cave. The emergence from the rock will be the act of rebirth—that is, the birth of the individuality. The rock is the same thing as the sea. It is the same thing as the womb of Sheol or the Hades of Christ. It is the same thing as the mountain which rests on Jonah. It is the same thing as the belly of the whale. From these situations, which are psychological and represent the movement of the libido into the unconscious, comes the resurrection. If we manage to undergo a psychological regeneration we throw off old attitudes and so become renewed. Part of the libido leaves the old values that we have worked with consciously, and goes down into the deep (rock, hut, mountain, whale, etc.) of the unconscious, where it finds the new symbol waiting, and re-emerges under a new attitude to life. This is the underlying idea in the treatment of all neuroses by psychological analysis as I understand it. When such a dream as the one I have just quoted occurs in patients it marks an important crisis. By analysis, we have to find out the necessary task, the new attitude. As I have said, there appear to be dreams dealing with the *motif* of rebirth in a minor way and others dealing with it in a major way. When the major symbolisms appear then the psychological development is at an extremely critical stage, and requires careful handling.

I have given dream examples dealing with the going into the womb—the first movement in the drama of rebirth. The emergence from the womb is the third act in the rebirth drama. Its treatment by the unconscious is extremely complicated. The idea that something is gained after the rebirth is put variously in myth and ritual; as a magic substance, a stick, a jewel, a new faculty of vision, a new power, a new protection from enemies, etc. In myths of higher culture, the thing gained is often expressed as divinity or immortality. This follows the release of the hero from the womb, and he may carry in his hand the magic thing—*e.g.* the heart of the monster, which is, psychologically, the new-born libido. The idea is well expressed thus in a dream of a patient of Dr James Young's. "*The patient knew there was a dangerous monster under the sea—it was like a submarine. People were all waiting in fear. Then up from the depths came a man. He had come out of the submarine, destroying it by so doing. He was borne upwards by a parachute, which he held in his upraised hand, and rose into the air.*"

Here is the *motif* of the rebirth of the hero out of the womb, with the magical power in his hand. The ship under the sea is the whale of Jonah. Such a dream marks an important phase. It is potential. But I cannot enter into this enormous field in this short paper.

I have given some suggestions concerning the significance of the mother and of the little child in dreams, regarded from the constructive or anagogic standpoint, and I would conclude by making a suggestion about the significance of the father in this respect. You are familiar with the Oedipus myth, in which Oedipus, the swollen-footed one, murdered his father and his father's charioteer and was confronted by the Sphinx. It is only after guessing the riddle of the Sphinx that he can pass into Thebes and marry Jocasta, his mother. This myth is very wonderful and contains many difficult points and it has been used in analysis chiefly as showing the tendency that is found for the striving towards the mother after the overcoming of the father. It has been only used in an objective relationship. The overcoming of the father is a theme that appears in the dreams of adults, especially when the need for individuality is strongest. The enemy in the dream frequently is connected with the idea of the father or with the idea of authority. With the development of individuality, when the power lies *within*, the *motif* of the father and of the enemy ceases. Psychologically we only overcome the father in ourselves through a rebirth of values in ourselves, and this is the development of the human spirit in all functions that are individual, and not merely a collective imitation. We give

birth to the father in ourselves and pass from what I would term the first psychological orientation to the second, and so enter a new myth-cycle. Just as the child stands between the mother and the father, so does the libido of the adult stand between the world of the magical unconscious and the world of stern reality—between the world of the germinating and becoming, and the world of fixed values. To overcome the psychological father (which always has a special meaning for each person and denotes a special use of a function) before the psychological mother (which always contains a special value for each person) can be reached means a sacrifice of that part of the libido which is held to fixed attitudes and old ways of thinking or feeling. To remain, however, 'in the mother' is disastrous—as disastrous as it was to Oedipus, who made himself blind. In giving these suggestions and interpretations I am aware that they are only outlines drawn from one angle, but they offer new avenues of approach to the subject of symbolism in dreams—avenues of approach that were originally opened up by Carl Jung. I think they are well worth following even though they lead into the most complicated mysteries, for the solution of which we have to turn to the records of folk-lore, mythology, religions and primitive culture. But the unconscious is primitive mind, and to understand it we must study the history of man, and the myth of man, which nowadays requires to be discovered afresh.

## STUDY OF A SEVERE CASE OF OBSESSIONAL NEUROSIS

By JAMES YOUNG.

THE patient came to me eight months ago complaining of obsessions of such severity that his life was a misery to him. He had often thought of suicide and had given up all hope of cure. He is aged thirty-three. He is the son of a Yorkshire manufacturer—a self-made man. Until the age of nine he was at a ladies' school. He was rather delicate and was a good deal at home due to illness. Later at a grammar school he took very badly to the more robust methods of both boys and masters.

To continue in his own words:

“At the age of thirteen I left school and gradually became interested in my father's business. I used to be with him a large portion of my time. A clothier's shop was opened for my brother who unfortunately did not give it the attention he might have done. So here I used to spend hours with father, often on Saturdays until ten and eleven o'clock. He thought a great deal of me and I of him. This state of affairs was continued for a few years.”

There is a history of a well-marked desire for exhibitionism about the age of puberty, gratified on two or three occasions. Masturbation also began about this period. Later developed the obsessive desire to micturate when about to engage in any activity which called for resolution or determination. This was specially liable to occur if this undertaking were something a little outside of the ordinary routine. At the age of nineteen he fell in love with a girl who accepted him as her fiancé. At this period obsessive emotions developed. If she lent him a book and he returned it, he always doubted whether he had returned it. He sometimes actually had to write the question “Have I returned so-and-so,” and she had to write the reply “Yes.” Verbal assurance was not enough. The patient destroyed not long ago a large sheaf of written questions and answers belonging to that period. The girl apparently was long-suffering, but after three years the association was broken off. The following summer he suffered from hay fever and has done so every summer since. This summer, however, it has troubled him much less than usual, whether due to vaccine treatment or in consequence of the

general psychological improvement I am unable to say. The range of the obsessions gradually increased. He had to refer the settling of the most trivial details to his parents. He could with the greatest difficulty leave home even for a holiday, and his life became restricted to the narrowest of circles.

At length came the war. He was exempted from military service many times on the ground of neurasthenia. Finally he was accepted and served in Mesopotamia and India for eighteen months, when he was invalidated—utterly broken down by the force of his obsessions. A typical one which occurred in India was as follows. Although there was a strict rule that topees should be worn on all occasions, once or twice he had run out of his tent without putting on his topee. The fear was that if anyone should die from sunstroke through not wearing a topee it would be due to his example.

The most striking feature in the above history is the obsessive desire to pass water at all sorts of inconvenient times. It was this for which he chiefly sought relief, because it restricted his wanderings to within a few miles of his home. It is notable that the desire did not have compulsive force if the patient felt free to gratify it at any moment. But in practically any circumstances where there was not easy or immediate access to a urinal, the compulsion would occur. The usual places were theatres, church services, clubs and railway compartments. Before going to keep an appointment he also always found it necessary to empty the bladder. Always in his mind he had the idea that he must be a success, that he must come up to his conscious estimate of himself as an intelligent and really rather an important man. If he could have felt indifferent, no compulsion would have occurred. He was always orientated by the idea of success—the philosophy of his father. It was as if he carried the competitive spirit of his business life into all the other relations of life. There was always the desire to be adequate or to dominate the situation. If at a meeting he spoke freely and successfully all compulsive desire to micturate vanished. He had been adequate in that situation.

If on entering a railway carriage he met with people with whom he could 'chat'—to use his own term—freely and as he might do at home or in his own circle of friends, there was no compulsion.

If, however, he could establish no *rapport* and so was left to his own resources, the compulsive desire to pass water occurred. If it were a corridor train with the usual toilet accommodation it mattered little, but if it were a closed compartment, the desire to micturate gradually



changed itself into the sensation of approaching orgasm and on many such occasions the actual *ejaculatio seminis* occurred. On no occasion, however, was the bladder actually emptied incontinently. This failure to establish a *rapport* resulting in compulsion of such enormous and incapacitating force would appear to be regarded by the ego as a menace to its supremacy. The fact that the patient is ignored or does not obtain an immediate reward for his infantile feelings calls forth an immediate protest. By the rules of ordinary behaviour he cannot force people to speak. But something must happen and so the libido spills over or regresses to the organic and power may be said to be expressed by the desire to micturate. Now, urination as an expression of power is a feature of primitive human conduct. Little boys perhaps first show the spirit of rivalry in seeing who can make his urinary stream go furthest or last longest. Men who are going to sit for an examination, or pass some other test, notoriously have frequency of micturition. It is as if power were called upon too soon and were side-tracked from the psychological into the organic. We have seen that the patient as it were anticipated events. It might be said that when a situation was to be met the libido was summoned too soon. It could hardly deal with a situation which had not developed and so perforce it regressed to the organic, and an emission either threatened or occurred.

In my opinion, this psychological hurry is another aspect of the will to dominate every situation. As the history shows it usually frustrated itself. The following dream is quoted as an unconscious picture of this functional tendency.

"I am with the army. We are marching and the leading section persists in going too quickly. Eventually they are much ahead of the remainder of the column."

In this and in other similar dreams the idea of hurry is clearly indicated. It is as if he attempted to keep his hand on the throttle of the future and so dominate the event by anticipating it. Now, when there is interference with the cortical system nervous energy is driven into the reflex autonomic system. Similarly, when energy is expressed in the inferior unadapted way which has been described, it must be either because there is no potentiality of a higher path, and so of more adapted functioning, or because the higher path is not sufficiently canalized. That is to say, it is undifferentiated. It offers obstruction to the nervous impulse and so the latter chooses the line of least resistance along a lower path. An example of this lack of differentiation is seen in the case of the child who in its early efforts to climb a rope in the

gymnasium, experiences, during the intensity of muscular exertion, sexual excitement and sometimes orgasm. It is as if the neuro-muscular system were not sufficiently canalized or differentiated to allow the full influx of energy. Again there are people who see colours when they hear sounds. This phenomenon is called coloured audition. It is often regarded, specially by those who experience it, as being something rather remarkable, as evidence of high development or of artistic potentiality. But it is really due to lack of differentiation. The two functions of sight and hearing are still to some extent fused. They have not become discrete, clear-cut functions. They are not self-determined. They are not differentiated. Now if we view this case of obsessional neurosis in the light of the above remarks we shall see that when a situation was to be met, the energy available used often to express itself through the organic channel in urinary or seminal discharge. This means that there was an absence or limitation of canalization, in higher purely psychological paths, so that the libido of the patient was short-circuited and his expression was inadequate. A part of his psychology remained as it were in the mass—undifferentiated. This is what Jung calls the undifferentiated co-function in the unconscious. It is unconscious because it is undifferentiated. It is potential. I shall call it the inferior function. In this case I think it is feeling which is the inferior function.

It may be asked why does the inferior function remain inferior? The reply is that his family life in which he is so bound up does not tend to develop his feeling. His father's philosophy is exceedingly hard and materialistic. His life has been exclusively devoted to the acquirement of wealth. His religious beliefs were of a crude fire and brimstone order, which made life for his sensitive son bristle with taboos and prohibitions. It is easy to understand that feeling with the patient under these influences is at a discount. But feeling, and that of a very finely graduated kind, is demanded in the various relationships of life outside the family. It is in the feeling relationship that the patient invariably fails. He states that he assumes a pleasant manner to everyone but rarely feels it. Certainly his uniformly pleasant manner is abnormal—almost irritating. In matters of conduct he always represses his feelings. He asks himself "Is this right or wrong?" rather than "What do I feel?" He distrusts feelings. They are irrational. They might compromise him. This distrust is understandable when one thinks how crude and undifferentiated his feeling has shown itself to be in the course of analysis.

For these reasons, then, we say that feeling is the inferior function. In so far as the patient calculates rather than feels his way into life he tries to adapt by means of thought, with distressing results as we have seen. This attempt at adaptation is always with a view to the preservation of his own integrity. He is therefore still identified with the infantile pleasure principle. He has not accepted the pain principle. He has not left his parents either geographically or psychologically. That would certainly mean sacrifice and suffering, which he regards as one aspect of the irrational. Through his father's influence the idea has been ingrained in him that by taking thought, by being prudent, one can secure oneself against the chances of life. This prudent rationalism is backed by all the instinctive energy which has not been freed from the parents as object. In this instinctive energy is included his sexuality in an infantile or primitive form. The force which motivates his rationalism is therefore immensely powerful. The power system is directed by the whole of the instinctive energy which strives, not to lose itself in the scheme of things as they are, but to confine itself in the mould of the infantile pleasure principle. This seeks to maintain that security from the chances and changes of life—the immutable integrity of the ego—which is associated with abnormally prolonged dependence on parental love. It might be said that the onward movement of life is denied and resisted by all the force of that power which should affirm it—that is, sexuality. This is auto-eroticism. It includes the activities usually associated with the term masturbation, but it transcends the ordinarily accepted bounds of the term, because it is developed into a well-organized, if limited, intellectual system. It has become a "Will to Power." I shall call this the superior function. To be identified with it results in a condition which Jung has called God-Almightiness. The rationalistic power system is compensatory for the inferiority of the unconscious feeling. At no time in the analysis has the material shown anything that would indicate an organic inferiority or insufficiency in the sense in which Adler uses the term. In my experience the question of organic inferiority plays a minor part in the great majority of neurotics.

We must now turn to the question of how the inferior function is to be differentiated and made a conscious adapted function—in other words how the mass is to be canalized. During the first two months of rather irregular analysis, the patient became aware that the possibilities of his life had been restricted in no small degree by his fixation to the family. At the same time an orientation about sexuality was obtained. This delivered him from a feeling of isolation and insecurity with regard

to sexual matters, which caused repression of them and contributed to his efforts to maintain his rationalistic power system. The micturition compulsion almost disappeared. He was able to travel long journeys and sit out theatre performances with little or no trouble. At this period he had the following dream.

"I am playing the piano. It seems to be an unusually large one and I can play faster, better and more freely than ever before—such lightning movements."

Associating with piano, he said that he was very fond of playing it, that he had often had recourse to it when hard pressed by obsessions, and that it called forth more feeling in him than many human relations—the piano was larger than usual both in height and compass.

Now here is the idea of greater compass—greater range combined with greater freedom and dexterity. This is exactly what is required psychologically. In my opinion it is the unconscious representation of the potentiality for canalization or differentiation of the crude psychological mass, which I have called the inferior function.

This is most important from the point of view of prognosis. There are neurotics and psychotics whose dreams show the instrument under symbols other than the piano, as being limited or incomplete or feeble. Such dreams may be of great value in indicating how far the psychological condition can be improved by analysis or in indicating a fundamental primary and irremediable defect or deficiency. This important factor in prognosis was pointed out to me by Dr Maurice Nicoll and illustrated by a striking dream of a patient which I am not at liberty to quote.

I am aware that a Freudian interpretation of this dream would reduce it to a repressed masturbation complex. This is inevitable, as the Freudian system is based on the theory of sexual determinism. I am far from minimizing the part played by sexuality in this case. I shall emphasize it later. But it must be pointed out that in the course of analysis, masturbation had ceased to be an acute problem. For that reason perhaps the practice had almost ceased. Therefore, as there was no repression, on which the genesis of the dream depends according to the Freudian system, I submit that the significance of this dream does not refer to the sexual history and therefore to the past, but to the psychological potentiality and so to the future. In this connection it may be interesting to quote from a document which the patient brought about this time. Under the heading "Particular results of analysis," two extracts are as follows:



"Whilst walking along Oxford Street yesterday I experienced a feeling as though somewhere inside my brain a new hope were dawning. There was also a physical sensation as though about one square inch of material lifted. I felt this in the left side of my head."

"During the same afternoon I had a picture—a very live one—of a thin snake stretching from the neck to the forehead under the skin. A lid opened. The head appeared and thin sunlight seemed to stream in."

These would appear to be insane phantasies, but I think they have validity as prognostic signs at that time. The first is an unconscious picture of the lifting of the repression. The second embodies a *motif* which is universal in mythology—instinctive libido under the symbol of the snake becoming active and moving towards the surface. It probably signifies that amount of energy which through analysis has been released from an unsuitable form.

Let us now turn to the aetiology of the obsessions. "Freud came to the conclusion that obsessive processes represent the return in a distorted guise, of self-reproaches dating from childhood and buried since then until the outbreak of the malady. They always refer to *active* sexual performances or tendencies." I quote from Dr Ernest Jones's book, *Treatment of the Neuroses*. This theory of origin holds good in this case. By analysis those obsessions with a manifest sexual content were easily traced back to a specific or a typical episode of adolescent sexual life. For example, he had an obsessive fear that any woman who touched a letter which he had written after an act of masturbation would become pregnant. This made him destroy many letters from time to time. It was traced back to an early sexual misadventure which had caused him great suffering and anxiety. Many other obsessive fears, such as his being the cause of pregnancy or of being the means of transmitting disease in various ways to others—were found to have their origin in past sexual incidents.

But the obsessions spread from the purely sexual field to a much wider field of human relations. For instance, on his way home from India, he bargained with an Egyptian boy about some coins. A British comrade remarked that he was rather hard or unfair to the boy. At the same time an older Egyptian beat the boy for making such a noise. The latter ran away. A railway was near, the track of which was used by pedestrians. The patient feared that the boy might be killed by a train and that he would be responsible. This gave rise to one of the worst and most enduring obsessions he ever had. It lasted for about six months.



What is it that determines this enlargement of the obsessive field beyond the purely sexual? According to the Freudian teaching these obsessions are the results of *displacement* of affect on to non-sexual themes. It follows that if all sexual repressions are brought into consciousness, there should be no more obsessions of any kind whatsoever. Now in this case I think that after six months of analysis all sexual repressions *had* been brought into consciousness. Yet obsessions still occurred, particularly those of self-reproach, although not with such overpowering force. If he borrowed money and was not able to pay it back because the lender was out of reach, he became quite distressed. It was as if he felt himself at the mercy of the world because he was a borrower. It was not consistent with his conscious estimate of himself as an upright citizen. His infantile power system kicked and screamed because his integrity was in danger. His rationalism cannot accept a situation which is incomplete or dubious. It is irrational for him and the principle which is common to all the obsessional ideas, whether sexual or not, is the irrational. From this point of view the obsession may be said to be due to the fact that the superior function (the rational) gets its teeth into the irrational event or possibility and will not let go. There comes a deadlock in the psyche, which monopolizes the whole of consciousness. The question may now be asked, does it help the patient to attribute the meticulous accuracy, the tyrannical scrupulosity of the last-mentioned obsession to a mechanism of sexual repression? Will such knowledge in itself suffice to release the patient from the power of the obsession? I think not. I think that this accuracy or scrupulosity with regard to money to which I have just referred is something important in itself. It is due to that attitude which embodied the crude parental philosophy. I do not think that to reduce this characteristic down to a repressed infantile anal eroticism helps to rob it of its power. I think the redemption from the distressing psychological impasse which so often occurs is through the differentiation of the inferior function of feeling. This can only be brought about by a constructive technique directed to broadening the patient's outlook and philosophy of life, which we have seen to be so limited. The differentiation of feeling proceeds hand in hand with the broadening of the basis of personality. The possibility of this broadening was indicated in the dream of the piano and the process has proceeded steadily and I think satisfactorily. His obsessions now take no organic form whatever and the intensity of the purely ideational ones is greatly diminished. He is able on many occasions to *feel* that what he fears may happen, has every right to

happen, must have happened to other people, and so on. When he really *feels* this the obsession loses its force. It is significant that the unconscious has been much occupied with religion, particularly with oriental forms, the symbols being often reminiscent of his experiences in India. A short time ago he dreamt the following.

"I was in a strange house. I heard a great noise, shouting and the clanging of a bell. A big strong man wished to come in. He called out 'I declare unto you a new religion. I can quiet you and change your present mode of life.' But I was afraid of him and he passed away."

This dream speaks for itself. It may be that if the patient can incorporate the feeling values which are symbolized by the man of the dream he will be delivered from the tyranny of the superior function, and so cease to suffer from that God-Almightiness which has crippled his life.

## LA TENSION PSYCHOLOGIQUE, SES DEGRÉS, SES OSCILLATIONS<sup>1</sup>

PAR PIERRE JANET.

### LA HIÉRARCHIE DES TENDANCES<sup>2</sup>

IL est facile d'affirmer d'une manière générale que la force et la tension psychologique jouent un rôle considérable dans la conduite humaine et qu'il serait nécessaire de les apprécier pour se rendre compte de la nature et de la gravité d'une maladie mentale. Mais en pratique il est extrêmement difficile de mesurer ces qualités de l'action, car nous connaissons bien mal les caractères qui mettent en évidence la force et l'élévation d'un acte. Sans doute de belles études dont plusieurs ont été faites ici même ont permis de classer quelques-unes des actions les plus élémentaires. M. Sherrington nous a appris à distinguer parmi les réflexes ceux qui sont prochains et ceux qui sont lointains, ceux qui sont simples et ceux qui dépendent d'une intégration plus avancée du système nerveux. M. Head nous a montré des sensations primitives et d'autres plus évoluées en rapport avec l'activité de l'écorce cérébrale. Mais ces notions fondamentales qui rendent de grands services dans le diagnostic des lésions élémentaires sont encore bien peu applicables aux troubles de la conduite qui se présentent dans les névroses et dans les psychoses. Pour comprendre ceux-ci il nous faudrait établir les mêmes classements dans les actions bien plus compliquées qui constituent les relations sociales, qui remplissent la vie humaine de chaque jour; il faudrait établir non seulement le tableau hiérarchique des réflexes élémentaires, mais le tableau hiérarchique de toutes les actions humaines, même de celles qui entrent dans les conduites morales ou scientifiques. Cela est évidemment aujourd'hui un rêve bien téméraire, mais l'utilité d'un tel tableau fait excuser les tentatives trop audacieuses. C'est pourquoi je vais essayer de vous présenter une esquisse rapide d'un tableau hiérarchique des actions humaines que depuis bien des années je m'efforce de construire dans mes cours au Collège de France.

<sup>1</sup> Three lectures delivered before the University of London.

<sup>2</sup> Second lecture delivered May 12, 1920.

## I.

Au début de ce tableau nous placerons la conduite animale, car l'homme a d'abord une conduite animale sur laquelle il a édifié une conduite humaine, mais qu'il n'a pu supprimer car elle est indispensable<sup>1</sup>. Cette conduite animale est relativement aux conduites proprement humaines une conduite simple: chaque action provoquée par la stimulation extérieure peut être composée de mouvements nombreux quelquefois compliqués et systématisés, mais elle reste simple parce qu'elle est accomplie d'une seule manière par des mouvements des membres sans être compliquée par le langage qui ajoute aux mouvements des membres une seconde exécution de l'action. En un mot la conduite animale c'est la conduite simple sans la complication du langage, c'est la conduite avant le langage.

Le point de départ de la vie psychologique ne me semble pas devoir être cherché dans les sensations telles qu'elles nous sont connues quand nous les exprimons par le langage, car il s'agit là de phénomènes psychologiques beaucoup trop complexes. Les premiers actes psychologiques dérivent des grandes fonctions de la vie animale, la protection du corps, l'alimentation, l'excrétion, la fécondation, quand celles-ci ne se bornent pas à déterminer des modifications à l'intérieur de l'organisme, mais quand elles donnent lieu à des mouvements des parties extérieures du corps ou à des déplacements de ce corps. Ces fonctions pour s'exécuter dans des conditions plus complexes ont besoin de mouvements de rapprochement et d'écartement qui sont les premiers faits psychologiques, points de départ de toutes les autres conduites plus élevées.

Quand ils sont tout à fait élémentaires, ces premiers mouvements prennent la forme d'*actes réflexes*. Les physiologistes donnent de l'action réflexe une définition fort juste à leur point de vue, mais incomplète quand nous tenons compte du point de vue psychologique. Ils constatent que les réflexes sont des mouvements de telle ou telle partie du corps ayant une étendue et une force bien déterminées qui se produisent régulièrement à la suite d'une modification également bien déterminée de telle ou telle partie de la périphérie du corps. Si l'on se bornait à cette définition tous nos actes même les plus élevés seraient des réflexes:

<sup>1</sup> Ces études sur les conduites élémentaires ont été présentées dans les cours de psychologie du Collège de France, 1904-5. Cours sur *les mouvements des membres*, 1909-10, sur *les tendances élémentaires*, 1910-11, sur *les sensations et les perceptions*. Des résumés de ces cours ont été publiés dans *L'Annuaire du Collège de France*; j'espère pouvoir un jour les publier complètement dans mes *Eléments de psychologie clinique*, en préparation.

je viens de commencer à parler quand M. le président m'a donné la parole, c'est aussi une réaction déterminée à la suite d'une certaine réception et cette conférence est en un sens un réflexe. Comme nous nous proposons de distinguer les actes les uns des autres et de séparer ceux qui sont inférieurs de ceux qui sont supérieurs, je vous proposerai de compléter un peu le sens du mot réflexe quand nous parlons le langage de la psychologie en ajoutant certains caractères négatifs à la définition précédente. Les réflexes sont en outre des actes explosifs qui commencent quand la stimulation atteint un certain degré et qui une fois commencés se déroulent complètement, au moins quand ils ne rencontrent point d'obstacles, jusqu'à ce que la tendance soit complètement déchargée. Ils ne peuvent s'arrêter d'eux-mêmes à tel ou tel degré de leur développement, ils ne peuvent pas davantage être complétés par une addition de force quand la décharge est insuffisante. Les réactions d'écartement, phénomène essentiel de la douleur, les réactions de rapprochement, phénomène essentiel du plaisir, les réactions d'introduction dans le corps et d'excrétion qui en sont des complications se présentent au début sous cette forme.

Au-dessus des réflexes ainsi entendus se sont constitués des actes qui se réalisent d'une manière un peu plus compliquée. Les tendances ne se déchargent pas d'une manière complète après la première stimulation suffisante, elles ne sont plus explosives. La décharge se fait en deux temps après deux ou plusieurs stimulations distinctes. La première stimulation éveille la tendance, provoque une certaine mobilisation des forces, elle est préparante; mais la tendance ainsi éveillée reste à un degré incomplet d'activation jusqu'à ce qu'une nouvelle stimulation déchaînante amène l'acte complet à la consommation. Le chien qui sent dans la plaine l'odeur du lapin ne fait pas immédiatement d'une manière explosive l'acte de manger du lapin, car il le ferait à vide, le lapin n'étant pas dans sa bouche. Le chien se borne à éveiller la tendance à manger du lapin jusqu'à un premier degré que l'on peut appeler le stade de l'érection, il la maintient à ce degré pendant qu'il va, vient, court de tous côtés; maintenant il voit le lapin, la tendance monte à un stade supérieur d'activation, mais ne se décharge pas encore. Enfin il a dans la bouche la stimulation produite par le contact de la peau du lapin, il laisse la tendance se décharger complètement et il mange le lapin. Ces *tendances suspensives* ou à activation échelonnée sont l'élément essentiel des perceptions, elles permettent la constitution de l'objet ou si l'on préfère des conduites en rapport avec l'objet. Les



notions relatives aux objets dépendent de ces actions variées, fuites ou attaques de différentes espèces qui sont déterminées par la présence prochaine ou lointaine de l'objet. Mais il s'agit toujours d'activations incomplètes de ces tendances arrêtées au premier stade, qui se présentent sous la forme d'attitudes, comme je le disais dans mes cours, ou de schèmes. La suspension de l'activation des tendances reste le caractère essentiel des conduites perceptives.

Par une confusion et une extension des tendances relatives au corps propre se sont constituées les premières *tendances sociales*<sup>1</sup>. La conservation du corps des semblables, l'imitation des actions commencées par eux et que l'on continue comme si elles étaient des actions du corps propre, l'acte de suivre le chef, la pitié, la collaboration aussi bien que la rivalité, la lutte et la haine sont devenues des actions bien systématisées. En même temps par un retour sur soi-même apparaissent les tendances personnelles, les tendances à se distinguer des autres, à jouer un rôle, à augmenter le corps propre par toutes sortes d'acquisitions. Ce sont toutes ces actions qui ont préparé les conduites conscientes que l'on a trop souvent le tort de considérer comme primitives.

Le caractère essentiel de ces conduites socio-personnelles me paraît être la collaboration des tendances. L'individu ne réagit plus seulement aux stimulations qui viennent du monde extérieur, il réagit à ses propres actions. Un nouveau mouvement est provoqué par le mouvement précédent comme si celui-ci était devenu une stimulation particulière. L'animal social ne collabore pas seulement avec les autres, il collabore avec lui-même, il surveille, il arrête, il complète ses propres actions. C'est là, si l'on veut, une variété des réflexes appelés proprio-ceptifs, mais une variété particulière qui est devenue le point de départ des phénomènes de conscience. L'acte conscient s'est constitué en même temps que les actes sociaux et ce degré d'évolution peut être appelé le stade des *tendances socio-personnelles*.

La plupart des animaux n'ont que des conduites appartenant à l'un ou à l'autre des deux groupes précédents, des actes perceptifs ou des actes socio-personnels. Certains hommes dégénérés, certains idiots se comportent de la même manière et ne dépassent pas ce niveau.

Nous trouvons au-dessus les actes qui constituent l'intelligence élémentaire, les premières *tendances intellectuelles*. Ces actes apparaissent

<sup>1</sup> *Les tendances sociales et le langage*, Cours de 1911-12; *les premières tendances intellectuelles*, Cours de 1912-13.

en germe et exceptionnellement chez certains animaux supérieurs et ce stade est en quelque sorte intermédiaire entre l'animal et l'homme. Nous ne connaissons guère de peuplade sauvage qui soit encore uniquement à ce niveau : les individus que l'on appelle des primitifs et auxquels on attribue l'intelligence dite *prælogique* sont comme nous allons le voir au niveau immédiatement supérieur. On pourrait dire que parmi les dégénérescences, l'imbécillité au moins dans ses formes inférieures correspond à cet état d'esprit.

Pour comprendre cette forme d'activité je vous proposerai d'étudier les conduites relatives à certains objets tout particuliers, par exemple les conduites relatives à un panier de pommes. Nous trouvons là d'abord les conduites perceptives relatives à des pommes, objets comestibles, petits, pleins, nombreux : chacun de ces caractères correspond à des mouvements particuliers. Nous y trouvons aussi les conduites perceptives relatives au panier, objet non comestible, grand, vide, unique, c'est à dire réclamant des mouvements différents. La conduite du panier de pommes, pour résumer ainsi les actes qui sont provoqués par lui, contient évidemment quelque chose de chacune de ces conduites, mais elle ne correspond exactement ni aux unes ni aux autres. Elle comprend en particulier deux sortes d'actions qui n'appartiennent ni aux pommes, ni au panier, l'acte de remplir le panier de pommes et l'acte de vider le panier. Ces deux actes qui sont caractéristiques de la conduite du panier de pommes contiennent l'un et l'autre des parties appartenant aux pommes et des parties appartenant au panier, mais ces actes sont mélangés, combinés ensemble à des degrés divers : dans l'un la conduite du panier prédomine, dans l'autre la conduite des pommes. Nous pouvons faire les mêmes remarques sur les conduites relatives à l'image, à la statue ou au portrait : il y a là des actes perceptifs correspondant à l'animal ou à l'individu dont c'est la statue ou le portrait et des actes perceptifs correspondant à la pierre ou au papier dont est faite l'image. On ne peut supprimer complètement ni l'un ni l'autre : se comporter complètement devant une image d'un animal comme on ferait devant l'animal lui-même, c'est se laisser prendre à un trompe-l'œil et non avoir la conduite de l'image. Celle-ci réclame une combinaison des deux conduites perceptives précédentes comme on le voit dans les deux actes caractéristiques de faire le portrait et de reconnaître le portrait où les deux éléments apparaissent à des degrés inégaux.

Un certain nombre d'objets réclament des conduites analogues, par exemple le drapeau, l'outil, le tiroir de l'armoire, la place du village, le chemin, ce sont des objets intellectuels. A propos de tels objets il y a

toujours combinaison de deux conduites perceptives et suivant la prédominance de l'une ou de l'autre il y a toujours deux actes caractéristiques, fabriquer l'outil et se servir de l'outil, tracer le chemin et suivre le chemin, etc. Cette combinaison de deux conduites perceptives en un seul acte synthétique me paraît le caractère propre des premières conduites intellectuelles. Ces conduites ont, si je ne me trompe, leur point de départ dans les actes sociaux, dans le besoin de modifier les actes individuels par l'addition de caractères particuliers afin de les rendre sociaux, de les rendre intelligibles aux autres, c'est à dire de permettre les réactions sociales.

C'est au milieu de ce groupe de tendances combinées et en même temps qu'elles que s'est constitué le langage qui est une conduite du même genre. La conduite de l'homme qui parle et la conduite de l'homme qui est parlé (si je puis me permettre l'emploi si utile de ce verbe au passif) sont sorties des actes du commandement et de l'obéissance qui existaient déjà chez l'animal. Mais chez les premiers êtres vraiment intelligents il y a eu à ce propos une combinaison des conduites relatives au cri, à la parole, et des conduites relatives à l'exécution des actes. Cette combinaison a donné naissance aux conduites relatives au signe comme précédemment aux conduites vis-à-vis du panier de pommes ou du portrait.

Ces conduites combinées et en particulier la plus importante, le langage, ont transformé les conduites précédentes et les ont intellectualisées. Le mot s'est ajouté à tous les actes et il a précisé la notion d'objet et d'individu. La plus grande intellectualisation a été la formation de la mémoire qui est une opération beaucoup plus tardive qu'on ne le croit généralement quand on confond la mémoire avec la simple conservation des tendances<sup>1</sup>. La mémoire est une certaine transformation de l'action de telle manière qu'elle puisse être communiquée même à des absents. La mémoire est d'abord le commandement aux absents avant d'être le commandement des absents. C'est grâce à cette adaptation à l'absence que la mémoire a pu être adaptée à une propriété remarquable des choses celle de devenir passées. Le passé et la mort ne sont primitivement qu'une absence prolongée. Mais il a fallu pour cela une modification remarquable de la conduite. Les tendances ne peuvent pas s'activer d'ordinaire indépendamment de l'événement qui leur a donné naissance et qui est leur stimulant. Le soldat se bat en présence de l'ennemi, mais il ne se bat plus quand celui-ci n'est plus là. La sentinelle placée aux portes du camp a dû à l'approche de l'ennemi con-

<sup>1</sup> Cf. *Les médications psychologiques*, 1919, II, p. 272

stituer une tendance à une action particulière. le récit, qui pourra être reproduite plus tard en l'absence de l'ennemi simplement par réaction à une question du chef. Cette transformation est des plus remarquables, elle rend la mémoire indépendante de la stimulation à l'action. ce qui aura plus tard une importance très grande.

Ce groupe des opérations intellectuelles élémentaires qui a donné naissance aux symboles, au langage, à la mémoire est l'un des plus importants et des plus difficiles à étudier: il constitue la transition entre la conduite animale et la conduite humaine. Les troubles qu'il peut présenter amènent les plus graves perturbations de l'esprit.

## II.

Par suite de diverses circonstances le langage de l'homme s'est développé démesurément et il s'est étendu à tous les actes, car chacun d'eux a été accompagné par une parole. Non seulement l'homme se servait du langage pour communiquer avec ses semblables, mais encore, comme il obéit toujours à la loi fondamentale de se conduire avec lui-même comme il se conduit avec les autres, il s'est mis à se parler à lui-même. Cette parole adressée à soi-même n'avait plus besoin d'être bien haute, car elle était saisie non seulement par l'ouïe mais par ces réceptions internes qui avaient permis dès le début les réactions de la conscience à nos propres actes. L'homme s'est parlé tout bas, la pensée est née, cette parole intérieure à laquelle aucun autre homme ne peut réagir excepté celui-là même chez qui elle se développe. De cette manière des paroles intérieures ou extérieures ont dorénavant accompagné toutes les actions ou à peu près toutes. C'est là ce qui caractérise les débuts de la conduite proprement humaine, car l'homme est avant tout un animal bavard qui parle ses actes et qui agit ses paroles.

A partir de ce moment l'homme a eu à sa disposition deux manières de se conduire à propos de toutes les circonstances. L'une était la conduite ancienne constituée par des mouvements des membres et des déplacements du corps, l'autre était également constituée par des mouvements, mais par des mouvements tout petits, d'une seule partie du corps, du larynx et de la bouche, par des paroles. S'agit-il de franchir la distance qui sépare deux points, l'homme peut marcher réellement avec ses jambes, mais il peut aussi comme les chanteurs de l'Opéra rester sur place en criant: "Marchons, marchons." S'agit-il de la lutte contre les ennemis, il peut se battre en réalité, donner des coups et en recevoir, mais il peut aussi rester chez lui en parlant de combats et de victoires.



Sans doute ces deux conduites ont des relations étroites l'une avec l'autre car le mot n'était primitivement qu'un fragment de l'acte. Mais elles ont cependant des propriétés fort différentes: l'action corporelle, si nous pouvons l'appeler ainsi, a des avantages anciens qui sont la raison même du mouvement des êtres vivants. Elle seule est capable de modifier le monde et de permettre le développement de la vie, elle est la seule vraiment indispensable, mais elle est lente et lourde, et fatigante. L'action verbale semble impuissante et incapable de changer le monde par elle-même, mais aisément communicable elle peut faire faire par d'autres le mouvement que nous ne faisons pas, elle peut même le faire exécuter par nous-même un peu plus tard; mais surtout elle est rapide, ailée et si peu fatigante, si peu coûteuse que comparée à l'autre elle représente une énorme économie de nos forces si précieuses.

Ces deux conduites qui ont ainsi des avantages différents sont juxtaposées et combinées de bien des manières et toute la psychologie des fonctions supérieures devient une analyse de ces relations entre l'action corporelle et la parole. Cette dualité de la conduite humaine est importante même au point de vue philosophique, car elle a été le point de départ de la célèbre distinction du mouvement et de la pensée, du corps et de l'âme, elle a donné naissance à la fameuse théorie du parallélisme entre les phénomènes cérébraux et les phénomènes de la conscience qui a eu une influence si funeste sur les études psychologiques. Bornons nous à constater que l'établissement de relations de plus en plus compliquées entre la parole et l'acte ont déterminé les progrès de la conduite humaine et constitué les stades supérieurs de la hiérarchie psychologique.

Au début, le mot et l'acte étaient inséparables, le mot n'était que le début de l'action, le cri que le chef poussait en commençant un acte pour en rendre l'imitation plus facile<sup>1</sup>. Mais déjà dans le commandement le mot s'est séparé de l'acte, puisque le mot existait chez l'un, chez le chef et que l'acte existait chez un autre individu, chez celui qui obéissait. Afin d'être mieux compris par le plus grand nombre le mot n'est plus resté attaché à une seule action précise, individuelle, il a été rattaché à plusieurs actions légèrement différentes les unes des autres, des mots sont devenus des symboles communs. La mémoire a construit des discours indépendants des actions au milieu desquelles ils étaient nés et capables d'être reproduits dans des circonstances différentes. Dans les plaisanteries, dans les conversations les hommes ont appris à jouer

<sup>1</sup> Cours de 1913-14 sur *les tendances réalistes*, 1914-15 sur *les tendances réfléchies*; cf. *Les médiations psychologiques*, t. pp. 215 et seq.



avec le langage, à tirer une excitation du langage lui-même indépendamment de l'action à laquelle il était primitivement lié. Sans doute cette séparation entre le langage et l'action n'a jamais été tout à fait complète car le mot aurait perdu toute espèce de sens, le sens du mot n'étant pas autre chose que l'action ou au moins l'attitude avec laquelle il est associé. Mais la séparation est devenue assez considérable pour que le langage perdît une grande partie de son utilité.

Le langage séparé de l'action était devenu en quelque sorte inconsistent ainsi que l'on peut le constater dans le bavardage de bien des malades. Ils modifient leur langage sous la plus légère impulsion sans se préoccuper le moins du monde du désaccord qui grandit entre leurs paroles et les actions faites par eux-mêmes ou par les autres. Les hommes ont éprouvé le besoin de faire des actes spéciaux pour rétablir intentionnellement cette union entre le langage et l'action ou pour établir et préciser le degré de leur séparation. Des opérations nouvelles ont cherché à rendre au langage une certaine consistance: la promesse est devenue une action qui transforme nos paroles et en refait des ordres pour nous-mêmes. Les promesses, les serments, les engagements d'honneur sont devenus le point de départ de l'affirmation qui a réuni de nouveau au moins dans certains cas l'action verbale et l'action corporelle.

Cette union entre la parole et l'acte s'est faite de deux manières qui ont donné naissance aux volontés et aux croyances. La volonté est une affirmation dont l'exécution est immédiate: je veux marcher et je marche, je veux sortir et je sors. Dans la croyance l'exécution immédiate est impossible; si je vous dis: "Je crois que le jardin de Hyde park est ouvert au public," je fais allusion à certaines actions, entrer dans le jardin, m'y promener. Mais je ne peux pas les exécuter immédiatement parce que le jardin n'est pas ici. Je me borne à unir la parole à l'acte conditionnellement: "Si je me trouve devant la porte de Hyde park, j'y entrerais, je m'y promènerais," c'est une sorte de suggestion à échéance.

Des variétés de la volonté et de la croyance ont créé de nombreux phénomènes psychologiques: je ne vous parlerai pas des acceptations, des refus, des négations, des affirmations intéressantes relatives à des souvenirs. Mais je vous rappellerai qu'à ce moment seulement ont commencé à se constituer les phénomènes si importants des désirs inséparables des croyances, comme l'ont montré autrefois les sociologues, en particulier G. Tarde. Sans doute l'appétit élémentaire existe dans la vie animale, il existe également chez l'idiot au niveau des tendances suspensives. Il n'est pas autre chose qu'un stade d'activation incomplète,

supérieur à l'érection dont nous avons parlé à propos des perceptions. Mais le désir proprement humain, le désir conscient et formulé dans le langage n'existe qu'au moment où nous nous représentons la fin de l'action, où nous la formulons par avance grâce à une croyance. Je vous rappellerai également une autre notion importante qui dérive de la croyance. De même que la conduite perceptive avait créé les objets, la conduite affirmative crée les êtres, car un être n'est pas autre chose qu'un objet auquel la dénomination et la croyance ajoutent la persistance, la stabilité.

Cette forme d'affirmation présente donc des avantages incontestables, mais elle est encore bien peu précise. Il n'existe pour elle que deux formes de paroles, celles qui restent inconsistantes sans aucune importance pour l'action et celles qui sont affirmées avec ténacité, entre les deux il n'existe pas d'intermédiaire. Une parole que l'on entend prononcer, une parole que l'on prononce soi-même tout haut, celle que l'on se borne à penser, une imagination, une métaphore, tout cela se confond : ou bien ce n'est rien, ou bien c'est un être affirmé avec conviction. Cette affirmation même, si brutale qu'elle soit, est-elle au moins appliquée avec quelque précaution ? Evidemment l'homme à ce niveau ne transforme pas toutes les paroles en volontés et en êtres, il en laisse un grand nombre conserver la forme inconsistante. Comment choisit-il les langages sur lesquels il opère la transformation ? Nous avons envie de répondre : il les choisit par des motifs raisonnables, en raison de la vérité qu'ils contiennent. Hélas c'est se figurer que l'homme est raisonnable avant qu'il n'y ait une raison et qu'il discerne la vérité avant de l'avoir inventée. Il suffit d'avoir fréquenté des névropathes ou même des gens qui se figurent ne pas l'être pour savoir que bien souvent l'homme veut et croit sans raisons. Bien des individus ont affirmé jusqu'au martyre les plus grandes absurdités, bien des malades dès que leur esprit s'abaisse affirment avec un entêtement désespéré des choses manifestement fausses.

A ce moment du développement, en effet, l'affirmation se fait presque au hasard. Elle dépend de la force momentanée qui accompagne telle ou telle formule, elle dépend de l'activation plus ou moins complète des tendances, des attitudes qui restent accrochées à certaines paroles ou sont éveillées au moment où les paroles sont prononcées. Tantôt il s'agit de tendances faibles ou de tendances mal éveillées dont les forces latentes ne sont guère mobilisées. Tantôt il s'agit, au contraire, de tendances puissantes ou de tendances excitables qui mobilisent rapidement, comme la fuite de la douleur, la peur, la colère, l'amour

ou simplement l'obéissance chez les dociles. Dans le premier cas les langages restent inconsistants, dans le second les langages accompagnés par ces fortes tendances sont immédiatement transformés en volontés et en croyances. Nous sommes à l'époque où l'on croit ce que l'on désire ou ce que l'on craint et où les croyances fondées sur des motifs aussi accidentels s'imposent avec une énergie, une ténacité que l'on ne retrouvera plus dans des croyances plus raisonnables.

Comment désigner ces tendances à l'affirmation immédiate qui créent à tort et à travers des volontés et des croyances sans aucune critique, simplement pour suivre l'impulsion momentanément la plus forte? J'ai employé dans mes cours divers termes, je les ai appelé des tendances asséritives parce qu'elles affirment, des tendances appétitives parce qu'elles créent le désir, ou même des tendances réalistes parce qu'elles donnent naissance aux êtres. Peut-être pourrait-on employer un terme plus frappant qui a aujourd'hui quelque succès quand on l'applique à tort à une maladie. Le mot pithiatisme me paraît fort mal placé quand on l'emploie pour remplacer l'ancien mot si célèbre d'hystérie; il pourrait peut-être être conservé pour désigner ce stade du développement de l'esprit humain si important, le stade des *tendances pithiatiques*.

La connaissance de ces tendances, si elle était plus complète, permettrait de comprendre ces mentalités si bien étudiées aujourd'hui par les sociologues comme MM. Durkheim et Lévy Bruhl<sup>1</sup> sous le nom de mentalités *prælogiques*. Des mentalités tout à fait analogues existent aujourd'hui d'une manière constitutionnelle chez les débiles mentaux. Les auteurs qui ont décrit les *prælogiques* semblent disposés à croire qu'il s'agit là de tendances psychologiques très différentes des nôtres. Je crois au contraire que nous possédons ces tendances aussi bien que les *prælogiques*; elles ont joué un grand rôle dans notre enfance, elles ne sont pas anéanties en nous, elles sont simplement dépassées par des tendances supérieures qui les dominent momentanément et il suffit d'une dépression accidentelle pour qu'elles réapparaissent toutes puissantes. Il ne me semble pas possible de comprendre les suggestions ni les délires si l'on n'a pas approfondi l'état mental pithiatique.

Les défauts d'une telle conduite sont trop évidents: tous les degrés de la croyance sont ignorés et la croyance est appliquée brutalement à tort et à travers suivant des influences accidentelles. La volonté et la croyance peuvent être momentanément très violentes, mais elles ne

<sup>1</sup> Lévy Bruhl. *Les fonctions mentales dans les sociétés inférieures*, 1910.

correspondent pas en réalité aux véritables dispositions de l'esprit: trop souvent l'homme est amené à regretter des affirmations de ce genre.

Aussi peu à peu se sont développées sinon une autre volonté et une autre croyance, au moins une autre méthode de localisation des volontés et des croyances. Cette transformation s'est faite par l'évolution d'un phénomène social extrêmement important qui devrait avoir une place plus grande dans les études de psychologie, je veux parler de l'opération de la discussion entre plusieurs individus qui opposent les unes aux autres leurs volontés et leurs croyances naissantes. Cette discussion sortie du bavardage et de la conversation a eu un long développement. Elle a fini par s'étendre à un grand nombre d'affirmations même quand l'homme se trouvait seul. *La réflexion* est une conduite qui reproduit en dedans de nous-mêmes la discussion d'une assemblée et qui ne laisse l'assentiment se faire qu'après une discussion interne. Ce travail se décompose en une série d'opérations psychologiques qui n'existaient pas au stade du pithiatisme. La première de ces opérations, le doute, est un arrêt de l'affirmation, un maintien actif de la parole à la forme de langage inconsistant. "La plus grande marque de puissance sur soi-même," disait William James, "est de suspendre sa croyance en présence d'une idée qui excite les émotions." Nous ne serons pas étonnés de voir cette opération fragile présenter bien des désordres chez les malades.

Pour sortir du doute l'esprit cherche par une interrogation active à évoquer les diverses tendances en rapport avec la formule proposée pour constater leur force véritable et permanente et non leur puissance momentanée. Quel genre de réponses cette interrogation va-t-elle obtenir? Il ne faut pas se figurer que dès le début la réflexion va être complète et qu'elle va se servir des notions psychologiques les plus élevées. Par exemple, nous pensons volontiers que la réflexion va évoquer des souvenirs: "dans une circonstance semblable j'ai déjà fait ceci et j'ai échoué" et nous pensons que la réflexion va se servir de ce souvenir pour éviter un nouvel échec. En réalité cela n'est pas possible; les souvenirs dont nous avons vu la formation ne sont pas des tendances puissantes capables de donner des ordres. Ce sont justement des tendances à des récits, très séparées des circonstances dans lesquelles elles ont été formées et très isolées de l'action. M. Lévy Bruhl dans son livre sur l'intelligence primitive s'étonne que ses sauvages ne tiennent pas compte de l'expérience, c'est que tout justement ils n'ont pas encore la mentalité d'un Claude Bernard. L'expérience ne fait pas au début partie de la réflexion. La réflexion évoque-t-elle au moins des règles morales et des règles logiques? Oui, sans doute s'il s'agit de règles trans-



formées en tendances à l'obéissance par un long usage social, s'il s'agit de rites traditionnels entourés de peurs et de respects. Mais non en aucune façon s'il s'agit de règles purement morales ou logiques qui demandent à être respectées pour elles-mêmes et qui ne sont pas transformées en tendances puissantes.

La réflexion primitive favorise seulement la lutte de nos tendances, mais elle les évoque toutes et leur permet de se présenter avec toute leur force latente. La lutte de ces tendances constitue la délibération quand elle doit aboutir à une volonté, elle constitue le raisonnement quand elle doit aboutir à une croyance. M. E. Rignano de Milan a bien montré que le raisonnement est une sorte d'essai de l'action par l'imagination; cette observation s'applique également à la délibération dans laquelle les choses se passent exactement de la même manière. Après cette lutte, après ces essais en imagination intervient la décision qui affirme, qui transforme la formule en volonté ou en croyance. Cette dernière opération est analogue à l'impulsion qui caractérisait les tendances pithiatiques, mais elle est précédée et transformée par tout le travail précédent.

Le doute donne naissance à l'idée qui est un langage arrêté d'une manière active au stade du langage inconsistant: l'homme prend des précautions pour que ni les autres ni lui-même ne le laissent dépasser ce degré. Le rôle de l'idée, de la conduite par l'idée, en sachant ce que l'on fait est considérable. Rappelons seulement que l'idée a permis l'essai de l'acte que nous avons déjà vu intervenir dans le raisonnement et qui facilite beaucoup tous les progrès. S'il fallait construire tout de suite en fer la locomotive qu'un ingénieur vient d'inventer, ce serait bien long et bien coûteux, il est plus simple de la construire d'abord en dessin sur le papier et de l'essayer en idée, ce sera beaucoup plus économique. L'intention également dérive de ces notions ainsi que la conduite intentionnelle qui prend deux formes suivant que nous avons nous-mêmes des intentions ou bien que nous soupçonnons les autres d'en avoir. Les explications des choses qui ont déjà commencé avec les productions artificielles et la recherche des procédés de production se précise par la recherche des intentions et des fins. D'autres variétés du doute plus ou moins complet donnent naissance à la conception du passé, de l'imaginaire, du mensonge qui est un développement de la ruse et de la cachotterie des stades précédents et qui va prendre une grande importance. Le mensonge aux autres va engendrer le mensonge à soi-même qui, si je ne me trompe, intervient dans beaucoup de délires. Le mensonge qui donne de l'importance à cette parole intérieure si



réduite que personne ne peut l'entendre ni la deviner amènera le concept de la pensée et de l'esprit: un esprit n'est pas autre chose qu'un être capable de dissimulation et de mensonge.

Il vaut mieux insister sur les transformations que la décision réfléchie impose aux volontés et aux croyances. La volonté réfléchie s'est rattachée à la personnalité d'une manière bien plus nette parce qu'elle ne dépend pas d'une impulsion momentanée, mais de l'ensemble des tendances. De telles actions font partie de la personne, elles entrent dans son histoire, elles sont accompagnées du sentiment de responsabilité. Les impulsifs du degré précédent n'avaient qu'un sentiment vague de leur personnalité, sans doute ils obéissaient à des instincts vitaux et de temps en temps ils présentaient de l'égotisme. Mais les hommes qui possèdent la volonté réfléchie sont devenus capables de faire des calculs d'intérêt, ils ont inventé le véritable égoïsme.

Une modification de langage assez curieuse accompagne ce développement, c'est l'usage des pronoms personnels pour remplacer le nom propre. Au début un individu nommé Jean se bat simplement tout seul, c'est le stade perceptif; puis il se bat en même temps que d'autres, en avant d'eux et en criant, c'est le stade social. Plus tard il reste immobile en criant aux autres: "Marchez, marchez," c'est le stade intellectuel; ensuite il précise sa formule de commandement en criant: "Jean veut que vous marchiez," c'est le stade asséritif. Enfin maintenant il crie: "Je veux que vous marchiez," c'est le stade réfléchi. Cette phrase signifie en effet non seulement que Jean veut que les soldats marchent mais encore que c'est lui-même qui le dit: Jean le veut et Jean dit qu'il le veut, c'est ce redoublement exprimé par le pronom personnel qui est propre à la réflexion.

J'insiste aussi sur une modification essentielle de la croyance. Les objets de la croyance simple du stade précédent avaient gagné la stabilité et la permanence, ils étaient devenus des êtres. Mais la réflexion ajoute qu'il s'agit d'une croyance de toute la personnalité, qu'il s'agit d'une croyance dans laquelle nous sommes capables de mettre de la passion. L'être auquel on parvient ainsi se transforme, il devient le réel par opposition à l'irréel de l'idée et de l'imaginaire. Les études sur les maladies mentales qui nous guident pour établir cette hiérarchie des tendances nous ont particulièrement enseigné cette relation entre le sentiment du réel et les opérations de la réflexion: c'est un point sur lequel nous aurons à revenir dans notre dernière leçon. Nous verrons que le sentiment du présent est également troublé quand l'activité réfléchie cesse d'être normale et que par conséquent il appartient égale-

ment à ce niveau. Bien d'autres faits seraient à signaler pour montrer les nombreuses conséquences de la réflexion: il s'agit là d'une opération fondamentale dans notre conduite et un grand nombre de troubles de l'esprit peuvent s'expliquer par des modifications de l'activité réfléchie.

### III.

L'activité réfléchie, plus élevée sans doute que l'assentiment immédiat, n'est pas tout dans l'esprit: elle est certainement dépassée par des activités psychologiques supérieures. Nous en serons facilement convaincus en étudiant les individus qui, soit constitutionnellement pendant toute leur vie, soit accidentellement au cours des dépressions, présentent d'une manière complète cette activité réfléchie, mais sont incapables d'aller au-delà. Ils présentent régulièrement quatre caractères principaux, la passion, l'égoïsme, la paresse, le mensonge qui découlent naturellement de la réflexion quand elle n'est pas dépassée. L'individu intéressé n'est pas le type idéal de la société contemporaine, nous sommes quelquefois capables de nous élever au-dessus.

Recherchons ce qui manque à l'activité réfléchie: on peut voir les insuffisances de cette conduite si on examine non les résolutions elles-mêmes, mais les exécutions de ces résolutions. "*Video meliora,*" disait Ovide, "*deteriora sequor.*" "Je vois le bien, je l'approuve et c'est le mal que je fais." Un alcoolique prend devant nous d'excellentes résolutions et deux heures après il s'enivre dans un cabaret. Bien mieux il y a des troubles de la volonté, des aboulies qui ne portent pas sur la décision, mais qui portent uniquement sur l'exécution: certains sujets n'hésitent pas pour voir le bon parti et pour l'adopter, mais ils sont pris de doutes, d'hésitations, ils présentent tous les troubles de la dérivation psychologique quand il s'agit d'exécuter.

Comment cela est-il possible? On pourrait dire d'abord qu'il y a un intervalle de temps entre le moment où la résolution est prise et le moment où il s'agit de l'exécuter. Je ne crois pas que ce soit bien important, la réflexion ne tient pas compte uniquement de l'état momentané des forces, elle s'appuie sur la force profonde de toutes les tendances et celle-ci n'a guère changé. Il y a surtout une différence dans la manière dont les motifs se présentent pendant la délibération qui précède la décision et dans les moments qui précèdent l'exécution. Dans la délibération les diverses tendances ne sont pas réellement toutes éveillées et n'ont pas réellement mobilisé leurs forces. Elles sont simplement exprimées par des formules verbales qui ont chacune une force très

petite, mais proportionnelle à celle de la tendance qu'elle représente. C'est d'ailleurs à cette réduction des forces verbales qu'est due l'économie des essais faits purement en paroles. La décision par la victoire de la formule qui représente la tendance la plus puissante a été obtenue en arrêtant simplement d'autres formules représentatives. Mais au moment de l'exécution il ne s'agit plus de lutter simplement contre des formules représentatives, on se trouve en présence des tendances elles-mêmes réellement éveillées et de grandes forces mobilisées. il n'est pas étonnant que la formule victorieuse se montre insuffisante.

Permettez-moi, je vous prie, une comparaison: La délibération se passe dans une assemblée magnifiquement composée des représentations de toutes les nations, elle aboutit à une décision acceptée par tous ces représentants. Etes-vous bien sûrs que les Etats vont immédiatement obéir à cette décision de la Société des Nations? Hélas, un de nos grands chefs militaires, un peu désabusé peut être, me disait dernièrement: "La Société des Nations n'aboutira à rien, car on a oublié l'essentiel. Il ne suffit pas de prendre des décisions entre représentants, il faut les faire exécuter par les nations représentées. Pour cela il faudrait une gendarmerie et on a oublié la gendarmerie." Quand la Médée d'Ovide nous dit en gémissant

" Aliudque cupido  
Mens aliud suadet, video meliora proboque  
deteriora sequor,"

elle a bien pris la résolution dans le parlement de l'esprit, mais elle ne peut pas faire obéir les tendances, car elle aussi, elle manque de gendarmerie.

Il y a cependant des parlements qui font exécuter les lois qu'ils ont votées, il y a des individus qui exécutent leurs décisions réfléchies: c'est qu'ils ont à leur disposition cette gendarmerie qui manquait aux précédents. Cela signifie qu'il y a dans l'esprit de nouvelles fonctions qui se sont constituées pour ajouter de la force aux formules verbales qui n'en ont pas une suffisante et qui doivent cependant triompher<sup>1</sup>. Je résumerai ces fonctions par un mot, il s'agit du travail et de la tendance au travail. Les psychologues n'ont pas à mon avis donné une place suffisante à l'analyse du travail, peut-être parce qu'ils ne se placent pas suffisamment au point de vue de l'action et qu'ils ne se préoccupent pas assez de sa force ou de sa faiblesse. Le travail est un genre d'action plus difficile et plus rare qu'on ne le croit. Il n'existe pas chez l'animal

<sup>1</sup> Cours de 1914-15, *les tendances rationnelles*, 1915-16, *les tendances explicatives*; cf. *Les médications psychologiques*, 1919, II. p. 77.

ni chez l'homme primitif malgré les apparences: nous les faisons agir et peiner pour notre avantage en utilisant leurs tendances inférieures à la recherche de l'alimentation et à la fuite de la douleur, mais ils ne font pas eux-mêmes l'acte du travail. Les criminologues, comme Maudsley, Lombroso, Ferri, Tarde, nous ont montré comment le travail disparaît chez les criminels et les prostituées: nous savons que le travail s'altère et disparaît dans une foule de névroses professionnelles, qu'il est absent dans les aliénations. C'est que le travail, l'effort, appartiennent à des tendances supérieures à la réflexion, que j'ai souvent essayé de décrire sous le nom de *tendances rationnelles* ou de *tendances érgétiques*.

Ces opérations sont caractérisées par une distribution particulière de la force: elles ne se bornent pas à utiliser la force accumulée dans des tendances inférieures, elles tirent leur force d'une réserve spéciale pour l'ajouter aux idées qui ne sont pas assez fortes par elles mêmes. Un homme qui a du caractère est un homme capable d'exécuter ses décisions, ses promesses, ses engagements, même si cette exécution ne lui cause aucune satisfaction actuelle. Vous avez en Anglais une excellente expression pour désigner "a reliable man," un homme sur qui on peut compter, car il exécute sa parole même si cette exécution lui coûte un effort.

Ces tendances jouent un rôle considérable dans la conduite morale: sans doute il y avait déjà de l'ordre, de la légalité dans les conduites précédentes: des tendances sociales s'étaient développées, des tendances à la sympathie, au dévouement étaient puissantes chez certains individus, la peur de la loi, la peur du châtement pouvaient déjà arrêter bien des criminels. Mais ce n'était pas la vraie morale, pas plus que le labour du bœuf n'est le vrai travail. Kant a bien compris le caractère essentiel de l'acte moral, quoiqu'il n'en ait pas donné la théorie psychologique. La morale consiste à faire son devoir, non pas parce qu'il plaît ou parce qu'on a peur du châtement, mais simplement parce que c'est le devoir. Il faut une réserve de forces particulière pour rendre un homme capable d'exécuter un acte de cette manière. Ce n'est pas là seulement une notion morale, c'est une observation psychologique et même une observation clinique. La valeur d'un homme se mesure par sa capacité à faire des corvées: le devoir n'est qu'un cas particulier de ces corvées que l'homme supérieur est capable de s'imposer.

Bien des faits psychologiques dépendent de cette notion fondamentale du travail: l'attention volontaire bien différente de l'attention spontanée, la patience pour supporter l'attente, l'ennui ou la fatigue, l'initiative, la persévérance, l'unité de la vie, la cohérence des actes et



des caractères, toutes choses qui ne sont pas seulement des vertus mais des fonctions psychologiques supérieures. Je veux seulement rappeler l'importance des principes de la raison, de ces règles de logique analogues aux règles morales auxquelles l'homme s'impose d'obéir. Le principe d'identité est, disait-on autrefois, une loi absolue de l'esprit à laquelle la pensée ne peut pas échapper. Quelle erreur! Dans les bavardages, dans les rêves, dans les religions, dans les délires les contradictions et les absurdités sont perpétuelles: les rêveurs, les malades continuent à penser et même à croire avec conviction malgré ces contradictions. Le principe d'identité n'est pas une loi de la pensée, c'est une loi que l'homme impose à la pensée quand il veut être raisonnable et quand il peut l'être. De même que l'homme ne doit pas dans la cité avoir des pensées trop opposées à celles des autres citoyens, de même il ne doit pas être en contradiction avec lui-même et quand il est capable d'effort il s'impose cet accord avec lui-même comme il s'impose l'exécution de ses promesses. Par ce travail il transforme aussi l'aspect du monde: à l'être et à la réalité il ajoute la vérité, car la vérité c'est ce que nous croyons non seulement après réflexion, mais après soumission aux règles.

Vraiment il semble que chacune des grandes fonctions psychologiques se soit particulièrement conservée et développée dans certaines professions. Nous avons vu que le parlementaire, l'avocat, représentaient la fonction délibérative de la réflexion. Il me semble que le professeur représente ces tendances au travail, à l'ordre, au système. Dans les niveaux précédents de l'activité psychologique les progrès, les inventions nouvelles se transmettaient d'abord par l'hérédité, puis par l'imitation, puis par l'ordre, puis par la discussion. Maintenant commence l'enseignement qui transforme les perceptions, les formules d'action pratique, les explications de telle manière que les élèves puissent les retenir, les répéter, les retrouver avec facilité. Une foule d'opérations psychologiques ou logiques ne sont que des procédés d'enseignement systématique qui se sont développés à ce moment de l'évolution.

Rien n'est parfait et nous devons toujours progresser. L'homme à système, l'esprit systématique qui résume ces tendances érgétiques a bien des faiblesses dans la lutte pour la vie, il devient facilement un esprit faux, dénué de sens pratique et il est vite écrasé par un individu plus adroit. Ce nouveau personnage sait tenir compte d'autre chose que de la loi et des principes, il sait tenir compte des faits. Nous nous figurons que tenir compte des faits est une chose bien simple et on a voulu faire de l'utilisation des souvenirs un caractère de la psychologie



animale. Il a fallu bien du temps pour s'apercevoir que bien des hommes, cependant supérieurs à l'animal, ne savaient aucunement tenir compte de l'expérience.

Le souvenir n'est pas une tendance à agir, c'est une tendance à raconter. Si par accident le récit détermine des actes, c'est qu'il reproduit maladroitement quelques-unes des actions qui ont accompagné sa formation, c'est qu'il cesse d'être un souvenir pour devenir une hallucination. Pour que le véritable souvenir soit de quelque utilité pratique dans la vie présente, il faut qu'il soit transformé. J'ai mangé tel fruit et j'ai été malade, j'ai pris tel chemin et je me suis égaré. Ces accidents ne sont arrivés qu'une fois et n'ont pu par la répétition créer des tendances: pour que le premier événement soit considéré comme aussi dangereux que le second il faut que l'esprit établisse un rapport de production entre les deux événements, il faut qu'il tire de ce récit un ordre: "ne mange pas ce fruit, ne prends pas ce chemin"; mais il faut surtout donner de la force à cet ordre qui n'en a aucune. Il est déjà difficile de donner de la force à un précepte généralement adopté par la tribu quand cet ordre n'est pas devenu une tendance puissante. Il a fallu la longue éducation de l'humanité par les religions de morale austère, il a fallu l'acquisition de la domination sur soi-même, l'habitude de sacrifier ses préférences pour que l'humanité devînt capable de donner de la force à l'ordre issu du souvenir. *La conduite expérimentale* est une conduite vertueuse dans laquelle il y a de l'humilité pour exprimer son système avec hésitation et doute, de la fermeté morale et du caractère pour attendre le fait et pour éviter "de donner le coup de pince à l'expérience," de la résignation pour accepter le verdict de la nature. La religion ne devrait pas être trop sévère pour la science, car c'est elle qui l'a enfantée.

On croit d'ordinaire que cette conduite est réservée au savant qui construit la science et qui expérimente dans son laboratoire. C'est une erreur, le savant précise cette conduite d'une manière particulière, mais il ne l'invente pas. Dans les temps modernes l'esprit expérimental est répandu partout: une cuisinière, a-t-on dit, fait de la science expérimentale quand elle vérifie le temps de cuisson d'un œuf à la coque. L'habileté pratique, la critique des systèmes par leur succès pratique, le besoin de vérification d'un appareil aussi bien que d'un récit, le besoin de confirmation par les observations d'autrui, le sentiment du possible à la place de l'absolu, la conception de la nature, de la loi naturelle, du déterminisme sont des choses partout répandues. Les premiers progrès se sont faits, a-t-on dit, par la méthode de "trial and error," cela est

juste, si nous comprenons bien que c'est nous qui parlons d'essai et d'erreur et que l'animal lui-même ne fait pas d'essais et ne reconnaît pas d'erreurs. C'est chez l'animal une certaine agitation et une certaine cessation de l'agitation qui nous présente l'apparence de l'essai et de l'erreur. Il a fallu bien des siècles pour que les progrès se fassent réellement par "trial and error" pour que l'homme soit devenu capable d'essayer, de constater ses erreurs, d'utiliser de tels souvenirs et de tenir compte de l'expérience.

Nous ne pouvons essayer de prévoir l'avenir ni de deviner quel sera le nouveau progrès de l'esprit et la nouvelle étape de son développement. Peut-être pourrions nous avoir une indication en étudiant les idées de progrès et d'évolution qui depuis quelque temps s'ajoutent aux idées de loi naturelle et de déterminisme. Sans doute le progrès et l'évolution existent depuis longtemps et toutes les tendances que nous avons décrites sont sorties successivement des tendances primitives à l'écartement et au rapprochement par une invention et un progrès incessants. Mais, de même que la méthode de "trial and error" était appliquée inconsciemment, les progrès étaient accomplis sans être recherchés ni compris comme tels. Prendre conscience du progrès, de sa possibilité malgré le déterminisme, comprendre les idées de hasard, de liberté et d'évolution, tout cela me semble une étape nouvelle dans laquelle l'humanité paraît s'engager. J'ai souvent appelé de telles tendances des tendances artistiques parce que les arts ont toujours cherché à cultiver l'originalité, la nouveauté, parce que tous les actes nouveaux se sont d'abord présenté sous la forme artistique avant de prendre la forme pratique. Mais il est évident que ce mot n'est pas absolument juste car des arts ont existé à toutes les étapes du développement. L'art n'est pas autre chose que la mise en pratique des procédés d'excitation et il y a eu de l'excitation à toutes les époques. Il serait plus juste d'appeler ces tendances *des tendances progressives*, car l'idée de progrès et la recherche du progrès en sont le caractère essentiel.

Une des conséquences les plus remarquables de ces nouvelles tendances me paraît être le développement des conduites individuelles et originales, comprises et recherchées comme telles. On admet que chaque homme a son individualité sans réplique, on veut avoir vis-à-vis de lui une conduite également spéciale et individuelle. C'est la recherche de l'intimité, "parce que c'était lui, parce que c'était moi." L'individualité est étendue même aux événements qui semblent avoir chacun des caractères propres, qui n'ont pas existé tels auparavant et qui ne se reproduiront jamais exactement les mêmes. Les sciences de l'histoire

dont le développement caractérise cette période ont sur ce point une attitude embarrassée. Elles répètent bien avec Aristote qu'il n'y a pas de science de l'individuel et qu'elles cherchent des lois générales; mais elles se complaisent dans l'érudition, dans la biographie qui met en lumière le fait individuel. Vraiment, si j'ose faire une comparaison semblable, l'historien se conduit comme le géographe qui décrit minutieusement les détails individuels propres à une région. Mais le géographe a une excuse, c'est qu'il nous fournit un guide précieux quand nous nous promènerons dans la région. Est-ce que l'historien ne conserve pas au fond de l'esprit une pensée qu'il n'ose pas avouer, c'est que l'homme se promènera un jour dans le passé?

Les plantes se bornent à pousser dans l'espace, les premiers actes des animaux ont permis les mouvements, puis les déplacements du corps qui ont triomphé de plus en plus de l'espace. Les conduites en rapport avec le temps ont été bien postérieures et bien moins heureuses, car nous nous bornons encore à pousser dans le temps comme des plantes dans l'espace. La mémoire, ce commandement aux absents ne s'applique au passé que fort indirectement et n'a pas de prise sur lui. Ce n'est qu'au moment des conduites expérimentales que l'action humaine a utilisé le passé et encore dans une bien faible mesure. Les actes où interviennent les notions de progrès et de création libre essayent de mordre sur le temps et de rapprocher le futur. Est-ce qu'un jour l'homme ne fera pas dans le temps des progrès analogues à ceux qu'il a faits dans l'espace? L'évolution n'est pas terminée et l'action humaine a été et sera encore une source de merveilles.

Ces espoirs bien chimériques sans doute, mais consolants pourront peut-être faire pardonner l'aridité de ce long résumé. Excusez-moi d'avoir voulu vous présenter un tableau raccourci des diverses conduites humaines dans leur ordre d'évolution afin de vous donner le sentiment de la hiérarchie des fonctions psychologiques. Cette notion me semblait indispensable pour comprendre les oscillations de l'esprit.

## CRITICAL NOTICE.

*Instinct and the Unconscious: A contribution to a Biological Theory of the Psycho-neuroses.* By W. H. R. RIVERS, M.D., D.Sc., F.R.S. Cambridge University Press. pp. viii + 252.

"The aim of the study set forth in this book is to provide a foundation for a biological theory of the psycho-neuroses." The attempt to establish this foundation occupies the first fourteen chapters. The formulation of the theory and its application to the psycho-neuroses are compressed into five chapters, consisting in all, of only 40 pages. About one-third of the whole book is made up of six appendices, in which the practical application of the theory is illustrated by cases derived from Dr Rivers' personal experience of the psycho-neuroses of war. The most interesting and instructive portion of the book is that in which the attempt is made to find a biological background for the various psychological mechanisms accepted by Dr Rivers as being concerned in the production of the psycho-neuroses and allied states.

One of the most striking features of "the system of psycho-therapy which came to be accepted in Great Britain in the treatment of the psycho-neuroses of the war" was the unanimity with which those medical officers who had had previous training in psychology, as well as those who had not, accepted the Freudian doctrine of repression as a causative factor in the production of those bodily and mental disorders which came to be grouped together under the term 'shell-shock.' This one concession to the truth of psycho-analytic theory was made by many who were, and who remain, firmly opposed to Freud's teaching as a whole; and of all who appreciated the importance of repression as a psychopathological mechanism, no one has brought more original thought to bear on its possible implications than Dr Rivers has done in this book.

Dr Rivers seems prepared to accept the mechanism of repression, as well as some other Freudian mechanisms, but his study of the psycho-neuroses of warfare has led him to believe that the pathogenic importance ascribed by Freud to repressions in the sexual life finds here no justification, however important these may be in the causation of civil or peace neuroses. But he thinks that repression bearing on another group of instincts—the danger-instincts which have arisen in the service of self-preservation—does sometimes, when it fails, give rise to just those mental and bodily disorders, characteristic of the psycho-neuroses, which were so widely observed in 'shell-shock' cases. Such differences as are found between the neuroses of war and those of civil life are, he thinks, due in large measure to the differences in the nature of the instinctive tendencies which have escaped from control. So far, however, as mechanism is concerned, his conclusions are quite on psycho-analytic lines: "the main function of psycho-neurosis," he says, "is the solution of a conflict between opposed and incompatible principles of mental activity."

In the elaboration of his views Dr Rivers makes a praiseworthy and painstaking endeavour to make clear the sense in which he uses various



terms which have become common in psychopathological writings; and this is the more necessary since he uses some of them in a sense different from that which is customary. His first task is to make as clear as possible the sense in which he uses the two terms incorporated in the title of his book, namely, 'instinct' and 'the unconscious.' Very rightly, as I think, he uses the term unconscious only in what psycho-analysts call its 'systematic' sense. He says, "In so far as the term the unconscious applies to experience, it will be limited to such as is not capable of being brought into the field of consciousness by any of the ordinary processes of memory or association, but can only be recalled under certain special conditions."

Experience of which this is true he calls 'unconscious experience.' His use of this latter term has shocked some of the academic psychologists and the philosophers, just as the notion of 'unconscious ideas' had already done; for they maintain that consciousness is of the very essence of experience. This objection apart, however, there is perhaps some ambiguity in Dr Rivers' use of the words. Generally it is plain that he means by 'unconscious experience' experience that has become unconscious, that is to say, the residua or dispositions left in the mind in consequence of experience; and it is not clear if he would regard as 'unconscious experience' the unconscious activity the occurrence of which he admits. It seems possible to understand his use of 'unconscious experience' in these two senses, namely, either as past experience which has *become* unconscious, or as present experience which *is* unconscious; and although the examples he gives in illustration of his use of the words are to be understood in the former sense, some of the conditions he describes would imply the latter.

The process by which experience becomes unconscious Dr Rivers speaks of as 'suppression.' It is a process which takes place unwittingly, without conscious effort. He chooses the term 'repression' to indicate the process by which we wittingly endeavour to banish experience from consciousness. This would appear to be a most unfortunate choice of words. The principles involved in what is here called suppression are principles which, without any doubt, we owe to Freud's teaching, and to the mechanism by which mental processes are kept out of consciousness he applied the term '*verdrängung*.' The psycho-analysts of English-speaking countries have, almost unanimously, adopted the word 'repression' as a suitable translation of this, and have used it extensively in their writings as a technical term which carries with it all the implications of the German word as used by Freud. Consequently, nothing but confusion can result from any attempt to substitute another word,—even if it be etymologically more correct,—for that which has come into common use. Especially is this so when the term whose ordinary usage has been discarded is used to describe a very limited part of the whole process to which it was originally applied. Many writers have felt the need of separate terms for the two processes—the pushing out of consciousness what has been there, and the exclusion from consciousness of what is endeavouring to get in—and some writers have used the words suppression and repression in just the opposite way to that which Dr Rivers has adopted; that is to say, they have used suppression in the sense in which Dr Rivers uses repression, and they have used repression in the sense in which he uses suppression. This way of using the words is not so apt to lead to confusion as that chosen by Dr Rivers, for at least the word repression is here applied to the main part of the process which the psycho-analysts understand by this term. Although



I deprecate Dr Rivers' use of these terms it will be necessary, for the purposes of this notice, to adhere to his terminology.

A physiological parallel to suppression is found by Dr Rivers in the control or inhibition which belongs to the essence of nervous activity. "The suppression by which experience becomes unconscious is only a special variety of the process of inhibition common to every phase of animal activity." The examples chosen to illustrate this parallelism are taken from the work of Dr Head and his colleagues on protopathic and epicritic sensibility, on the relation between the cerebral cortex and the optic thalamus, and on the 'mass-reflex.'

When in the evolution of the nervous system, epicritic sensibility arose, the more primordial protopathic sensibility became in great part suppressed. The vague and crude character of the sensations in the protopathic stage, which sufficed for such movements as would withdraw the threatened part from contact with an object, was incompatible with the finer discrimination and localisation of the stimulus necessary for more intelligent behaviour. Protopathic sensibility, therefore, had to be suppressed, because its persistence would have been detrimental to the developing organism. A somewhat similar relation exists between the cerebral cortex and the optic thalamus. When the cortex is in action the affective over-response which Head and Holmes observed in cortico-thalamic lesions is largely suppressed. So, also, the mass-reflex obtained from the lower end of the spinal cord, when this is isolated from the rest of the nervous system, is wholly suppressed in the normal human being. Dr Rivers sees in these examples a number of processes which form intermediate links connecting the suppression of highly complicated mental processes at one end of the series with the suppression necessary for the perfection of reflex action at the other end of the series.

In considering the nature of the content of the unconscious Dr Rivers gives in illustration the experiences repressed in a case of claustrophobia, his own missing memories of childhood experiences connected with a particular part of the house in which he spent his early years, and the disappearance from consciousness of intellectual and emotional experiences observed in cases of war-neuroses. In all these instances, as also in suppressions at the sensorimotor and reflex levels, he finds that the elements which produce the need for suppression belong to the affective aspect of the mind, and he concludes that suppression is especially apt to occur as a means of getting rid of painful experience, the memory of which would interfere with comfort and happiness, or, as its immediate effect, would prejudice health. This conclusion is not far removed from Freudian teaching, although perhaps the utilitarian aspect of suppression is given more prominence than the purely hedonic aspect which Freud emphasises. But, on the whole, Dr Rivers thinks that the relation of affect to instinct suggests that "the special function of the unconscious is to act as a store-house of instinctive reactions and tendencies, together with the experience associated with them, when they are out of harmony with the prevailing constituents of consciousness, so that, when present, they produce pain and discomfort." This is practically pure Freudian doctrine both as to the mechanism of 'suppression' and, in general terms, as to the nature of the content of the unconscious.

Its innate character is taken to be the distinguishing mark of instinct on the biological side, but various kinds of instincts, differing according to their psychological character must be recognised. Certain forms of instinct are

believed by Dr Rivers to conform to the 'all-or-none' reaction in which there is an absence of graduation according to the conditions by which the behaviour is produced. He finds this all-or-none principle holds very largely true of protopathic sensibility and of certain reflex actions, such as the 'extensor thrust,' and the mass-reflex. So, also, in the child, or in the adult whose emotions are not well under control, instinctive or emotional response to a dangerous situation tends to exhibit the characteristics of the all-or-none principle. In addition to the absence of graduation in the response to stimulation, its immediacy is another characteristic, as is also the absence of discrimination in regard to the degree of danger which is threatened.

When he first put forward the view that instincts are subject to the all-or-none principle Dr Rivers implied that this held true of all instincts, but he now admits that such features as lack of discrimination and absence of grading in the response are not found in the behaviour of many animals whose activities are universally regarded as our pattern of the instinctive. As he says, "it is certain that the all-or-none principle does not hold good of the activity of the bee when constructing the cells of the honey-comb." He thinks, however, that the original modes of response in the insect were of a crude and more 'protopathic' kind, and that these have been modified and regulated by some graduating influence comparable to that which is exercised by intelligence in the grading of certain human instincts. This influence he identifies with suggestion which, with its three constituent processes of sympathy, mimesis and intuition, he regards as an "aspect of the gregarious instinct whereby the mind of one member of a group of animals or human beings acts upon another or others unwittingly, to produce in both or all a common content, or a content so similar that both or all act with complete harmony towards some common end."

The instincts which have most clearly retained their original protopathic character and remain subject to the all-or-none principle are those reactions which subserve self-preservation by ensuring protection from danger; but even here Dr Rivers has to admit that in man they become modified by intelligence and capable of graduation. The principle seems especially true of the reactions of flight and aggression, and also of the suppression of these when other modes of reaction, incompatible with them, come into play. In the reaction to danger by immobility the suppression of the tendency to flee or to fight must be complete if it is to be successful—it must be all-or-none. So, likewise, in man, when a dangerous situation is met by aggression, discriminative and chosen actions, such as the manipulative dexterity necessary for the use of weapons, requires that the crude instinctive impulse to fight in blind anger should be suppressed, though here the suppression need not be so complete.

Dr Rivers believes that originally suppression was subject to the all-or-none principle, but in the course of phylogenetic development became modified, so that now, in adult man at least, it is capable of graduation. Yet he thinks it may still be found in its original form in infancy, and in those morbid states which are associated with regression towards infantile forms of mental activity. It would seem probable however, that Dr Rivers has attached too great importance to the findings of physiological and pathological experiment, and has generalised too widely from the results so obtained. For every demonstration of the all-or-none principle has entailed some mutilation of the living organism whereby that inhibition which he admits to be common

to every phase of animal activity is completely abrogated. Such demonstrations can never show us that the all-or-none principle is ever exhibited in the normal reactions of any living creature, however low its organisation may be. So soon as multicellular organisms arose in the evolutionary process, the mutual inhibitions which mutual interdependence entailed would prevent the retention of the all-or-none reaction by any particular element, and would ensure a certain amount of grading in every response to stimulation. With the growing complexity of instinctive activities as we rise in the animal scale, the possibility and the necessity for grading would proportionately increase. If the grading of the human instincts were due only to the control acquired in the course of individual experience we might agree with Dr Rivers that, in infancy, examples of the all-or-none principle might be found; but when we consider the facts of inheritance, and realise what is innate in the human mind, we may be prepared to admit that the tendency to grading—*i.e.* the inhibitions— as well as the instincts, is there from the beginning. There are, therefore, good grounds for doubting whether the all-or-none principle is ever manifested by the intact living organism.

In such an example of suppression as he found in his case of claustrophobia, Dr Rivers recognises that the unconscious experience shows signs of activity. "This activity," he says, "is usually known by the name of dissociation," but he declines to adopt such a use of this term. And in this he is surely justified, for few, I think, would agree to such a definition. But in his desire to make the facts of psychopathology fit into his biological theory of the neuroses, Dr Rivers sometimes puts disconcerting restrictions on the meaning of terms in common use; and nowhere does this practice seem more confusing and unwarranted than in his chapter on dissociation.

He regards dissociation as a process which experience undergoes when it has been suppressed. The special feature of dissociation, as he understands it, is that the suppressed experience does not remain passive, but acquires an independent activity of its own. This independence of activity he regards as an essential character of dissociation. But another essential character he desiderates is "that this independent activity carries with it independent consciousness." Now I would submit that this definition is much too narrow, and that its adoption would lead to endless confusion.

Dr Rivers takes the fugue as the most characteristic example of dissociation, and by doing so he implies that in the fugue state we witness the independent activity of some suppressed experience. And this is, in some sense, no doubt true. There has been some suppression of feeling or desire which finds an outlet in the fugue. But this is very different from the independent activity witnessed, for example, in what Janet calls *monoïdeic somnambulism*; for here behaviour consists entirely of suppressed experience which is merely re-enacted in the somnambulism. Dr Rivers says, "the fugue usually comes into being owing to the fact that some unpleasant experience has become unconscious by the unwitting process of suppression"; but it is not the unpleasant experience in question which shows independent activity in the fugue. The fugue does not, in this respect, seem a very good example of the kind of independent activity which is held in this book to be characteristic of dissociation.

But "if we accept the fugue as a typical and characteristic instance of dissociation, we are at once faced by another problem of definition," namely, the question of "the independence of consciousness" which he holds to be

also characteristic of dissociation. A considerable amount of ambiguity surrounds his use of this phrase. As he truly says, "the subject of a fugue is certainly not unconscious," but his consciousness during the fugue is "cut off or dissociated from the consciousness of the normal waking life." In this sense it may be said that the 'independent activity' carries with it 'independent consciousness,' and Dr Rivers contrasts this with what occurs in claustrophobia, where the unconscious experience, though active, gives no evidence of independent conscious existence. He then goes on to say: "It is wholly out of place to speak of the unconscious or of unconsciousness in the case of a fugue, and Dr Morton Prince has suggested that we shall use the terms 'co-conscious' and 'co-consciousness' rather than 'unconscious' and 'unconsciousness.'"

I cannot help thinking that Dr Rivers here shows some misunderstanding of Dr Morton Prince's use of these terms—or, at least, that his reference to them may lead to misunderstanding in the minds of some of his readers. I do not think Dr Morton Prince would ever apply the term 'co-consciousness' to the consciousness manifested by a patient *during a fugue*. Whether or not he would consider the 'fugue-complex' to be co-conscious when the patient comes back to his normal state, is another matter. I believe he would agree with Dr Rivers that "in an ordinary fugue we have no evidence of such co-existence of independent consciousness." Nor is it correct to say that these terms are especially appropriate to the examples of double or multiple personality such as that of Dr Prince's patient Miss Beauchamp; for only one of the personalities in this case, namely B iii (Sally), was co-conscious. When, therefore, Dr Rivers tells us that he does not propose to adopt Dr Morton Prince's terms for the more ordinary cases of dissociation, we must reply: "Neither does Dr Prince."

In choosing the term 'alternate consciousness' to indicate the kind of independent consciousness shown in fugues, Dr Rivers is hardly introducing anything new into psychopathology. This term has been used for many years exactly in the sense in which it is used in this book, namely, to denote a phase of consciousness which alternates with the normal waking consciousness or with other secondary states.

Many years ago<sup>1</sup>, in attempting to classify cases of multiple personality, and, incidentally, all instances of mental dissociation, I tried to divide them into two great groups which I called the 'simply alternating' and the 'co-conscious' types. (It is necessary to qualify the word 'alternating' in this way because co-conscious personalities may alternate also. The true distinction lies in the presence or absence of co-consciousness.) In the simply alternating type there is reciprocal amnesia between the two states, and the one state does not 'know' the other,—A does not know B, and B does not know A. In the co-conscious type amnesia is in one direction only,—A does not know B, but B does know A, and when B comes as an alternating personality it remembers all that A has said or done.

Since a true co-consciousness—the existence of which, in some cases, Dr Rivers admits—is obviously an 'independent consciousness,' it would have led to greater clearness in his exposition if he had reserved the term 'alternate' for such independent consciousness as is exhibited in fugue (my simply alternating type) instead of using, as he does, 'alternate' and 'independent' indifferently, as if they were synonymous.

<sup>1</sup> *Proceedings Soc. Psy. Res.* 1912, Vol. xxvi, p. 257.



Dr Rivers' purpose apparently is so to define dissociation that it may easily fit into his biological theory of the neuroses. He states very clearly his conclusion regarding its nature, on p. 79. He there says: "The term 'dissociation' will then be used for a process of activity of suppressed experience in which this activity is accompanied by consciousness so separated from the general body of consciousness that the experience of each phase is inaccessible to the other under ordinary conditions, in which the two phases can only be brought into relation with one another by means similar to those by which experience can be recovered from the unconscious." Such a definition would exclude co-conscious personalities from the category of dissociation; for in these cases it cannot be said that each phase is inaccessible to the other under ordinary conditions. And if co-conscious personalities are excluded, then hypnotic states must be excluded, for the relation between a co-conscious personality and the normal waking self, in regard to the accessibility of the experience of each phase to the other, is precisely the same as that between the hypnotic and the waking state. Yet we find Dr Rivers saying, on p. 102, that "hypnotism affords a characteristic example of dissociation."

To say that "the hypnotic state only differs from... a fugue in having been produced by the suggestion of another person" is to misrepresent entirely the nature of fugue states. In a typical fugue there is that reciprocal amnesia between the two phases which characterises the simply alternating type of double personality, while between the hypnotic state and the waking state the amnesia is always one-sided. The memory in the hypnotic state includes the events both of hypnosis and of waking life.

In speaking of post-hypnotic suggestions Dr Rivers is constrained to suppose that in some cases their fulfilment may be accompanied by co-consciousness, and he says that this hypothesis would naturally lead us to an interpretation of the fugue on similar lines; that "it would lead us towards, if not to, the view that in a fugue the normal consciousness is there underlying the split-off consciousness accompanying the activity of the fugue." But does anyone suppose that *during hypnosis* the normal consciousness is there underlying the split-off consciousness accompanying the activity of the hypnotic state? What is sometimes asserted is, that in the waking life of a trained hypnotic somnambule the 'hypnotic personality' may persist, and be aroused to function as a co-consciousness,—as an independent stream of consciousness concurrent with the consciousness of the waking self. The true parallel in fugue would be to suppose that in the normal state of the patient the split-off consciousness of the 'fugue personality' is there underlying the normal consciousness. But while there is good evidence of such a possibility in the case of trained hypnotic subjects, there is no evidence, so far as I know, in favour of the view that such co-consciousness ever obtains in cases of fugue.

Thus, although Dr Rivers' definition of dissociation would seem to exclude co-conscious personalities (because here the experience of one phase is accessible to the other), he is evidently prepared to admit them among the dissociations provided that they alternate. It would also seem that when he speaks of 'independent' consciousness, he has in mind only 'alternate' consciousness, and disregards or disbelieves in the 'independence' of co-conscious states. It is because hypnosis is an alternate phase of consciousness that he regards it as independent, and includes it among the dissociations; but, as has been pointed out, the fact that the experience of the normal phase is accessible to the hypnotic phase should, by his definition, exclude it. It would, therefore,



seem that either his definition is faulty, or hypnotism should not be called a dissociation.

Seeing, however, that hypnotism is included among the dissociations, we are surprised to find that hysteria is excluded. He says that "if...we hold independent consciousness to be a necessary part of the concept of dissociation it is evident that hysteria wholly fails to answer to the definition, for there is no evidence whatever of such independent consciousness. In the absence of any evidence of alternate consciousness, it is doubtful if anything is gained by bringing hysteria within the category of dissociation. I have therefore no hesitation in excluding dissociation from the connotation of hysteria" (p. 134). He admits the close relation of hysteria to hypnotism, but he thinks it differs from hypnotism "in being unaccompanied by independent consciousness."

In speaking thus of hysteria Dr Rivers seems to have in mind only symptoms like anaesthesia and paralysis, for such hysterical manifestations as monoideic somnambulism, for example, present in striking form the characteristics of independence and alternation which he desiderates for dissociation. And even in anaesthesia the presence of 'subconscious' sensations, which Janet so clearly demonstrated,—sensations which Dr Morton Prince would call co-conscious,—is enough to justify us in speaking here of 'independent' consciousness. It has been so frequently insisted—and on very good grounds—that the phenomena of hypnotism and the phenomena of hysteria are indistinguishable, that it is difficult to understand, if this be so, how the former are examples of dissociation while the latter are not.

It is the biological significance which he sees in the process of dissociation as defined by him that makes it necessary for Dr Rivers so greatly to restrict the concept of dissociation. He seeks to show that there has been some biological need to account for the presence of dissociation among the potentialities of human behaviour. He points to the necessity, in such amphibians as the frog and the newt, for the suppression of the memories of one phase of their existence when the other phase is entered upon. "It is essential to the comfort, if not to the existence, of the frog that it shall not be disturbed by the memories of its experience as a tadpole." As early, then, as the amphibian phase of man's evolution the mechanism of dissociation was already present. In morbid states early instinctive modes of reaction tend to reappear, and the occurrence of dissociation under morbid conditions is an example of such a regression.

This is Dr Rivers' explanation of the mechanism of hysteria. He regards it as "a state dependent on the coming into activity, in a modified form, of a mode of reaction which dates back to a very early stage of animal development." It is a regression to one of the modes of reaction shown by animals when confronted by danger, namely, the reaction of 'immobility.' The paralyzes and anaesthesias of hysteria are partial manifestations of a process which, if it were complete, would produce immobility and insensibility of the whole body. In the war-neuroses the conflict between the danger-instincts and the call of duty is solved by a modified form of the "reaction of immobility," which brings about bodily states that unfit the soldier for further participation in warfare.

Dr Rivers seems to accept Babinski's view of the importance of suggestion in the production of hysteria, and, indeed, he has proposed 'suggestion neurosis' as an appropriate term for the state. Primarily, however, he regards it as

being due to the activity of a danger-instinct—an instinct whose primary function is protection from danger. For this reason he now prefers to call hysteria 'substitution neurosis.'

Dr Rivers sees that if his view of the nature of hysteria is sound, it ought to be possible to show that it holds good not only for the neuroses of warfare, but also for hysteria as we know it in civil practice. He admits that his own experience in this field is too small to enable him to deal adequately with this problem; but, even in the brief consideration he gives to it, he finds the difficulties so great that he is inclined to believe that the hysteria of peace and the hysteria of war are "two distinct varieties of hysteria," the two differing in the nature of their aetiology.

It is hardly possible to examine here Dr Rivers' application of his biological theory to the neuroses as a whole. Restricted in his experience, as he admittedly was, to the psycho-neuroses of war, he escapes many of the problems which are presented by the more complex conditions of the peace or civil neuroses. He admits the similarity of the mechanisms in both cases, but the importance he ascribes to the danger-instincts and his insistence on their sufficiency to produce the symptoms of hysteria and other neuroses, run counter, on almost every page, to that body of knowledge which psycho-analysis has built up in the course of many years of investigation of the neuroses and psychoses of civil life. Nevertheless, Dr Rivers' contributions to the problems of nervous and mental disorders are of great interest, and his endeavour to give them a biological setting is a legitimate application of that principle of continuity which should ever dominate the pursuit of the biological sciences.

T. W. MITCHELL.

## REVIEWS.

*The Croonian Lectures on the Psychology of the Special Senses and their Functional Disorders.* By ARTHUR F. HURST, M.A., M.D., F.R.C.P. London: Henry Frowde, Hodder and Stoughton, 1920. pp. x + 122.

The Croonian Lectures delivered this summer before the Royal College of Physicians are here published in full with additional case-records. They are devoted to a description and an interpretation of some of those symptoms which are manifestations of the psychical disorder often termed 'Hysteria,' a label which Dr Hurst adopts because of its ancient usage.

He defines an hysterical symptom as one "which has been produced by suggestion and is curable by psychotherapy," and hysteria as a condition in which such symptoms are present. That suggestion is perhaps an essential factor in the production of hysterical symptoms no one will gainsay. But such a definition does not take into account the variable suggestibility of different individuals or of the same individual on different occasions. Dr Hurst believes that "given a sufficiently powerful suggestion, there are probably no individuals who would not develop hysterical symptoms." But there are surely other variables than the strength of stimulus. It would seem evident that in any attempt to arrive at an adequate explanation of the occurrence of hysterical phenomena it is necessary to take into consideration not only the strength and nature of the suggestion but also the psychological situation of the individual before, during and after the presentation of the suggestion. Within the province of the enquiry should also be included the question as to whether hysterical manifestations show any trace of unconscious aim or purpose and the cause of their perpetuation in the absence of treatment.

Dr Hurst is of opinion that the patient who is suffering from blindness or deafness of psychogenic origin fails to see or hear because he is inattentive to visual or auditory impressions. One gathers from his book that he considers this process to be a passive one, a view which is in direct opposition to the findings of most investigators. In this connection mention may be made of the comparative freedom from anxiety and emotional distress in many patients with sensory or motor disturbances of psychical origin who before the appearance of the somatic disorders were depressed and worried. This observation which has been made by many psychologists seems to have escaped the attention of the author but it is one of some significance. Further no comment is made on the absence of paralysis and anaesthesia in so large a number of those cases of psychoneurosis in which anxiety forms a prominent symptom.

In his description of cutaneous, auditory and visual sensibility and certain associated motor and reflex disturbances the author has presented much interesting material. He brings forward a mass of evidence to show that the so-called mental and physical stigmata in hysterical subjects are the result of suggestion on the part of the investigator, and so far as the physical manifestations are concerned his findings are most striking. Of especial interest are his observations on the efficiency of the tests commonly used for diagnosis in cases of deafness. He clearly demonstrates the uselessness of the tests usually employed to distinguish complete deafness of psychical origin from that due to structural changes in the auditory apparatus. In both groups of cases there

may be failure of response to the vibrations of a tuning fork conducted through air or by bone, and the auditory-motor reflex may not be obtained. In addition Hurst has observed that patients with complete deafness which has proved later to be psychogenic in origin may, during sleep, appear to be entirely uninfluenced by loud noises, and under deep hypnosis may show a similar inability to respond to sounds. The tests, however, which are of value in differentiating the two groups of cases are those for the vestibular reactions; with deafness of psychical origin the vestibular reactions are normal while they are diminished or absent when the internal ear or the eighth cranial nerve has been injured. Many other points of practical importance will be found in this book which will be read with admiration for the success which has attended the author in his treatment of hysterical conditions.

GEORGE RIDDOCH.

*Suggestion and Autosuggestion.* A Psychological and Pedagogical Study based upon the Investigations made by the New Nancy School. By CHARLES BAUDOUIN. Translated from the French by EDEN and CEDAR PAUL. Pp. 288. London: George Allen and Unwin, Ltd., 1920. Price: 15s. net.

A book exclusively devoted to suggestion might seem almost an anachronism at the present day, when the analytic study of unconscious mental activity so completely holds the field in psychology, psychotherapy and pedagogy. But in the present volume Charles Baudouin has shown that it is still possible to say something new about suggestion and, what is more, something decidedly to its credit as a mental force. With great modesty he attributes his views to Emile Coué of Nancy, to whom he dedicates his book, and he devotes much space to a description of Coué's methods. But it is to Baudouin himself that our gratitude is due for the wonderful clearness with which he has presented these views and for the most interesting speculative theory which sums up his philosophical position.

After a clear analysis of earlier definitions of suggestion, in which he finds the emphasis wrongly put on the first part of the process, viz. the *acceptation* by the mind of the subject of an idea proposed or imposed by the operator, Baudouin defines it as "the subconscious realisation of an idea." He thus emphasises its active rather than its passive side, and also opens the way to the view that suggestion is primarily auto-suggestion and does not need an operator, and that hetero-suggestion itself is not the primary form, as is usually believed, but is secondary to, and dependent upon, auto-suggestion. Spontaneous auto-suggestion is continually occurring, especially in childhood, and is often noxious. It needs therefore to be counteracted. No doubt the greater intellectual insight given by analysis is the most effective antidote, but Baudouin has much to say in favour of counter-suggestion here, because he looks upon suggestion as an active force which can go beyond the neutralising of bad tendencies and, through the subconscious, can give greatly enhanced power over the physical organism.

The laws of suggestion are formulated as follows:

- (1) *Law of Concentrated Attention.* "The idea which tends to realise itself in this way [by suggestion] is always an idea on which spontaneous attention is concentrated, or an idea which has been forced on the attention after the manner of an obsession."



- (2) *Law of Auxiliary Emotion*. "When, for one reason or another, an idea is enveloped in a powerful *emotion*, there is more likelihood that this idea will be suggestively realised."
- (3) *Law of Reversed Effort*. "When an idea imposes itself on the mind to such an extent as to give rise to a suggestion, all the conscious efforts which the subject makes in order to counteract this suggestion are not merely without the desired effect, but they actually run counter to the subject's conscious wishes and tend to intensify the suggestion."
- (4) *Law of Subconscious Teleology*. "Suggestion acts by subconscious teleology. When the end has been suggested, the subconscious finds means for its realisation."

Baudouin attributes the great practical success of the New Nancy School to the explicit recognition of the law of reversed effort by Coué. Coué's own formulation of the law is as follows:

"When the will and the imagination are at war, the imagination *invariably* gains the day."

"In the conflict between the will and the imagination, the force of the imagination is *in direct ratio to the square of the will*."

It is thus clear that suggestion, which belongs to the sphere of imagination, is different in kind from voluntary effort, and that the attention, needed by it in accordance with Law (1), must not be *voluntary* attention. It is rather a state of *recueillement* (collection) and *contention*—the latter being a French term which Baudouin defines as "a psychological equivalent of attention, minus effort."

The author has much to say on the practice of auto-suggestion which is of the utmost interest and value, and he gives a description of Coué's practice and concrete results which will arouse high hopes. His occasional attempts to link up his doctrine with that of psycho-analysis are not conspicuously successful. Indeed, his apparent approval of the latter is little more than mere lip-service. He uses the term 'transference' where he should be speaking of 'displacement,' and he does not even mention the Freudian theory of suggestion as transference—thus missing a great opportunity of bringing the two schools of thought face to face. He sums up his ultimate theory in the pregnant words: "Suggestion (autosuggestion) is to the will what the complex is to the sentiment and what intuition is to intelligence." Whereas the will is the normal mode of acting on matter, on the external world, suggestion is the normal mode of acting upon ourselves as living beings. By training one's powers of auto-suggestion, one is therefore supplementing one's will-power, not supplanting nor diminishing it.

The obvious criticism that arises is that the subconscious plays too much the part of *deus ex machinâ* in this New Nancy Doctrine. There is a close resemblance, almost amounting to identity, between it and the *subliminal* of F. W. H. Myers. We need a more positive account of its nature and activities. For this we must look to the methods of psycho-analysis. Coué's law of reversed effort has long been known to successful suggestionists, but it is well to have the law accurately formulated and justified by skilful psychological analysis, as is done in these pages.

The book can be whole-heartedly recommended as the most important and helpful book on suggestion of modern times.

WILLIAM BROWN.



*The Elements of Practical Psycho-Analysis.* By PAUL BOUSFIELD, M.R.C.S. (Eng.), L.R.C.P. (Lond.). London: Kegan Paul, Trench, Trubner & Co., Ltd. New York: E. P. Dalton & Co., 1920. Pp. xii + 276.

When we speak of Psycho-Analysis we may be referring to a special technical method of investigating the human mind; or to the body of doctrine which has been built up on the results obtained by the use of this method; or to the practice of this method for therapeutic purposes. Anyone who undertakes to expound the elements of practical psycho-analysis needs to be very well qualified in all three directions; he must have a sound knowledge of the technique of the method; he must be well informed on the theoretical side; and he must have had sufficient experience to give weight to what he has to say on the practical applications of psycho-analytical doctrines.

Our doubts of Mr Bousfield's competence for the task he has set himself are aroused on reading his preface. He there concedes that Freud is the originator of the technique and theory of the psycho-analytic system, but he informs us that there are three notable subjects on which he considers Freud's evidence to be insufficient—"firstly, in his theory of complete determinism as opposed to Free-Will; secondly, in his statement that all dreams have the same causative factors; and, thirdly, in his theory that sexual desire is the fundamental desire underlying all the other desires and emotions."

Mr Bousfield's first point of disagreement with Freud arises from a strange misapprehension—a misapprehension which is not uncommon among some recent writers whose first introduction to psychology seems to have been by way of psycho-analysis. These writers seem to think that Freud was the originator of the notion of psychic determinism. The most casual acquaintance with the history of philosophy should have prevented such a misconception. In every attempt to subject the mind to scientific investigation we must, perforce, adopt the postulate of psychic determinism. Just in so far as we abandon this postulate we are abandoning scientific method. It is, however, open to anyone to believe that science is inadequate to the understanding of man's whole being, and to deny that there can be any true science of man. And so it is true, in a sense, as Mr Bousfield says, that "Freud's belief or otherwise in this matter does not in any way affect the main postulates of psycho-analysis"; for it is not a question of anyone's belief: it is a question of how far scientific method will carry us in our investigation of the human mind.

The author's second point of disagreement with Freud is too vaguely put to show exactly what he is referring to, but it is doubtful if Freud would say that all dreams have, in any sense, the *same* causative factors. The third point of disagreement, however, is stated explicitly enough, and is sufficient to show that Mr Bousfield has no real understanding of Freudian doctrine. Freud has, over and over again, insisted on the distinction between the sexual impulses and the 'ego-tendencies'; and, far from showing that "sexual desire is the fundamental desire underlying all other desires and emotions," his whole theory of the neuroses is founded on the conflict which arises between sexuality and the 'ego.'

Perusal of the body of this book serves but to justify the doubts raised in our minds by the preface. The author begins with a chapter on the unconscious mind in which, by way of simplification, he divides the mind into

conscious mind and unconscious mind, and denies the necessity for any more precise classification of mental contents and processes. This is a bad start for a book which purports to give an account of psycho-analytic theory; for if Freud himself found it impossible to formulate his views without introducing his conception of the preconscious, it is unlikely that Mr Bousfield will succeed where Freud failed. The psycho-analytic doctrine of the unconscious is now quite definite and precise, and it is desirable that a book dealing with psycho-analysis should expound psycho-analytic doctrine in terms which render its conceptions intelligible. In the absence of a suitable terminology we are not surprised to find it stated that the unconscious mind "can reason clearly, it can control to some extent the physiological functions of the body, it can carry out complicated automatic actions, known as 'habits,' it can to some extent register the thoughts of others by a 'sixth sense,' as yet but little understood, the process being known as telepathy."

Besides refusing to use the terms which psycho-analysts have provided for the exposition of their doctrines, Mr Bousfield commits the more serious error of using technical terms incorrectly. Thus, for example, he speaks of the exhibition tendency "sublimating itself as its antithesis"; he says of coprophilia that "its opposite becomes its sublimation"; he describes pity as the opposite of cruelty, and adds that "pity is a form of the sublimation of cruelty." In a footnote we are told that "pity and other 'opposite manifestations' are not true sublimations." That is so, for they are not sublimations at all. They have a different mechanism and a different name. Psycho-analysts call them 'reaction-formations.' Again, 'projection' is a technical term which does not mean the same thing as 'transference'; but on page 199 we read that "the impulses and emotions directed towards the father...have merely been projected upon the physician as substitute."

Not only is there misuse of technical terms in this book, but there is also serious misunderstanding in the author's mind concerning many important mechanisms. The processes of repression are here almost wholly ascribed to forces acting from without; hardly any indication is given that the repressing forces exist in the mind and are innate. In a similar way, the part played by *conflict* in the production of fixation is entirely missed. Dreams are not "outlets" for infantile wishes or for anything else; the dream does not serve two purposes, but one only—the preservation of sleep. Symbolism is not the only means made use of by the censor in dream distortion, as is implied in the summary at the end of the chapter on dreams. The assertion that "there is of course no fixed symbolism in dreams" is directly opposed to the views of psycho-analysts. The parents cannot be held responsible for a child's failure to sublimate his primitive impulses; for sublimation must arise spontaneously and cannot be forced.

When we come to the chapter on Functional Diseases we are apt to forget that we are reading a book the object of which is stated to be "to give an account of the theory, technique, and scope of psycho-analysis, in such a form that its essentials may readily be understood by the student or practitioner without previous systematic reading in psychology and psychotherapy." A member of an ambitious village choir, when asked if they did not find Handel too difficult, replied cheerfully, "Oh no, we alters him." This seems to be Mr Bousfield's way of making Freud's views clear to his readers. He says that Freud's classification of the various neuroses is probably the best, and adds: "if I vary this slightly it is in order to simplify it from the point

of view of the student." On the principle, presumably, that it is always desirable to teach the student something false to start with, in case he should learn the truth too soon, he gives a classification which includes early paranoia and certain cases of dementia praecox among the psycho-neuroses, and omits hypochondria from the list of actual neuroses.

It is difficult to imagine how his distinction between the psycho-neuroses and the actual neuroses is to simplify the student's task. The psycho-neuroses are, he says, "conditions following repressed ideas; the actual neuroses, those dependent upon accumulated emotions, whether ideas are there in a subsidiary form or not." This does not seem as simple as if he had said that actual neuroses are of physical origin, while psycho-neuroses are of mental origin — which is the essential difference laid down by Freud.

The promulgation of error in matters of theory does not perhaps do much lasting harm; but misdirection in the practical application of the methods of psycho-analysis has far-reaching effects which may be pernicious in many ways. It is therefore necessary to warn the student that the chapter which is devoted to the technique of psycho-analysis, and the chapter which gives extracts from the analysis of a case, should be read in conjunction with Freud's own papers on technique, or the writings of some competent exponent of psycho-analytic teaching. They will then be found useful as a very full account of "how not to do it," and the necessary 'dont's' may be interpolated in the text.

Questioning the patient about his life, and instructing him in psycho-analysis are not profitable ways of utilising the first few interviews. These are invaluable for free association, since the patient is then quite ingenuous, and reveals the kernel of his neurosis by allusions which the psycho-analyst can easily understand. If questions are asked all indications of the degree and character of the resistance to the emergence of the facts will be lost. No questions should be asked except to make clear some point about which the patient is talking; for much can be learnt from the patient's attitude about volunteering facts. Facts are, however, the unimportant things in analysis; it is the buried feelings which have to come out, and in regard to these it is no use to probe and force; the patient must overcome his own resistances. Nothing extracted by the analyst will help him.

It is highly undesirable, in these early interviews, to explain the nature of analysis, since all knowledge of this kind is useful to the resistance, and warns the unconscious how to avoid discovery. Certain explanations may be given *later on*, but only as opportunity arises. Any preliminary explanation interferes with the subsequent emergence of associations. It is not desirable to "point out that the patient is not alone in possessing repressed infantile forms of sexuality etc." All reassurance of this kind, as well as any expression of opinion or indications of praise or blame by the analyst, hinders the appearance of the patient's subjective, unconsciously controlled, ideas on the matter.

The extracts from an analysis show very clearly the author's mistaken tendency to 'attack' or 'concentrate on' whatever he wishes 'to remove,' and his failure to appreciate the necessity for passivity on the part of the analyst. The methods described may be of value for some purposes, and anyone is free to adopt them if he finds them suitable; but no one has any right to teach that these are the methods of psycho-analysis.

In regard to the applications of psycho-analysis to educational and social problems a strong protest must be made against Mr Bousfield's attempt to

force his own views on the public as if they were legitimate inferences from psycho-analytic practice, or accepted truths of psycho-analytic doctrine. One striking instance of this may be mentioned. Throughout this book a notable depreciation of women and of all that is distinctly feminine, obtrudes insistently on the reader's mind. It looks as if the writer was in some way afraid of women. Again and again he declares that there is far too much 'artificial differentiation' between the sexes, and he shows but grudging acceptance of such differentiation as "nature has itself bestowed." He thinks that moral education will some day ensure that the woman of the future is not differentiated from the man, either as regards clothing, business remuneration, or anything else 'artificial.'

Whatever Mr Bousfield's private views of the proper relationship and desirable difference, or lack of difference, between the sexes may be, or whatever opinions about woman's dress, woman's conversation, woman's titles and woman's privileges he may hold, he has no possible justification for implying that these views and opinions are based on the results of psycho-analysis, or that they correspond in any way to its aims. The past history of mankind provides us with enough examples of noble men and women to serve as models in the future, and we need neither hope nor expect to breed a race of *artificial* beings such as Mr Bousfield desires, or to construct a human society devoid of those amenities and courtesies which are naturally pleasurable to everyone. His diatribes against sex-differentiation are diatribes against the sex-instinct, against normal human nature and its normal enjoyments. A world of sexually indistinguishable human beings such as that looked forward to by Mr Bousfield is mere phantasy, and has no part or place in psycho-analysis—except in so far as, like all phantasies, it is not devoid of psycho-analytic meaning. In the past, man's jealousy has undoubtedly been the main factor in excluding woman from the enjoyment of much in life for which she is naturally qualified, but this has not been so detrimental to women or to humanity as would be the effect of man's fear, if it led him to attempt to deprive her of her womanliness and of her distinctive, feminine, part in life.

T. W. MITCHELL.



## ABSTRACT.

## OEDIPUS AND THE SPHINX.

By THEODOR REIK.

Abstracted from *Imago*, Vol. VI, pt. 2, by CECIL M. BAINES.<sup>1</sup>

“Lo, Oedipus  
Who solves the riddles sublime.” SOPHOCLES.

Untrammelled by the long-cherished prejudices of a cultural society, psycho-analysis has thrown light upon the nature of the deepest psychic impulses, and, in so doing, has discovered the hidden meaning of the Oedipus myth in its universal application to mankind. It has taught us that the old story is that of the fulfilment of the two mighty, primitive desires, which are of crucial importance in the development of individuals and of peoples.

Psycho-analytic investigation may well busy itself with the figures of Oedipus, the riddle-solver, and of the Sphinx. In this paper an attempt is made to solve another riddle, that of the being of the Sphinx itself, the winged monster, sister of countless similar figures, which in prehistoric times were introduced from Western Asia.

In entering upon our discussion, two paths are open to us: we may seek to find the interpretation of the Sphinx in its connection with the Oedipus story, or to solve the riddle in conjunction with that of the allied figures of the ancient Orient. If we adopt the former method, we run the risk of taking for the original a late and secondary figure with all its acquired meanings; if the latter, we are confronted with difficult questions arising out of the development of human thought and belief. Yet this is the method we have chosen to adopt.

The Sphinx is not autochthonous to Greece, but is found in Egypt and the adjoining countries. These figures have a lion's body, and a human head, and are akin to the other phantastic hybrid creatures of antiquity, *e.g.* the siren, the harpy, the griffin and the cherubim.

These Sphinx figures vary in many particulars: some have male faces, others female; some are standing, others crouching or lying. They are found on all manner of objects: sculptured reliefs in temples, utensils of various sorts, ornaments and scarabs; some are colossal statues, others are of a delicate minuteness.

The many contradictory features in the Sphinx figures make interpretation difficult, whether it be attempted by psycho-analyst, historian, archaeologist or artist. The following are some of the many attempts at explanation:

- (a) the Sphinx represents a king or queen, as is shown by the efforts after portraiture and by the inscriptions;
- (b) the Sphinxes are images of the gods (a frequent classical interpretation);
- (c) they represent watchers before temples and palaces;
- (d) they are symbols of wisdom, strength and understanding.

<sup>1</sup> This abstract is, in the main, an abridged translation and is published here by kind permission of the Editors of *Imago*. (Ed.).



No really satisfactory explanation of the Egyptian Sphinxes has been arrived at, and the same is true of the Sphinx of Oedipus, which has been interpreted as a prophetess or a daring female robber. Modern explanations incline to the allegorical, the Sphinx being regarded as the understanding invisibly present in the head of man. Very popular are those interpretations which see in the Sphinx a symbol of Nature power, *e.g.* of Helios or Aether, sunrise or sunset, the waning moon or the powers of the under-world.

Nor have the psycho-analysts failed to seek an explanation. Rank would interpret the figure of the Sphinx by connecting it with the ancient myths which identify the human and the animal mother suckling their young. But, since the Sphinx combines the upper parts of a woman with the lower parts of a male animal, he has recourse to the familiar dream-vision in which all human beings, female as well as male, have the penis, and discloses a hidden homosexual element in the interpretation of the Sphinx of the Oedipus myth, tracing to this element the anxiety affect. According to this theory the Sphinx would be a secondary representation of the mother. Laistner, in his well-known work, *The Riddle of the Sphinx*, also makes use of the anxiety dream in his explanation.

C. G. Jung brings forward his theory of the theriomorphic representation of the libido. He sees in the Sphinx a 'half-theriomorphic' representation of that mother-imago, which may be designated the Terrible Mother, of whom we find many traces in mythology. "The libido," he says, "thus theriomorphically represented, is the repressed 'animal sexuality.'" This is the root from which Jung always derives the theriomorphic attributes of the gods. According to this explanation then, the Sphinx is an 'anxiety animal,' showing clear traces of its mother-origin. It represents "an original incestuous amount of libido detached from the bond to the mother<sup>1</sup>."

For any satisfactory explanation two things are necessary: (1) that all the striking and essential features of the Sphinx, however seemingly contradictory, should be made comprehensible, and (2) that the connection between the Oriental type of Sphinx and that of Greek legend should be made clear.

We will postulate that the Sphinx of Gise, representing the antique Western Asiatic type, is closely related to that of Oedipus as shown on Etruscan funeral urns.

Our investigations will take as starting-point the outward form of the Sphinx, which, as a creation of human phantasy, must yield its own interpretation. The creation of such a composite form is analogous to the condensation which takes place in dreams, by which one person in the dream may be a composite figure, bearing resemblance to several real people, often combining many contradictory features in a single whole.

A similar psychic creation occurs in the hallucinations of persons suffering from psychoses. Doctors who practise the psycho-analytic method have shown that the seemingly absurd figures are full of meaning, though investigations are necessarily incomplete owing to the peculiar nature of psychotic illness, in which there is a breaking of the connection with the real surroundings. Yet all analysts agree that the hallucinatory apparitions are in every instance subject to determination and that their explanation lies in the emergence of recollections of definite experiences and impressions, to which are attached special emotional affects. They can only be understood when their proper

<sup>1</sup> v. Jung, *Psychology of the Unconscious*, pp. 204, 205.

place as a feature of the illness is assigned to them, and no exception to their absurdity is taken at the outset.

In illustration of these remarks we may quote the case of a patient of Dr Bertschinger, in which there was a special liability to apparitions of composite figures, *e.g.* (a) a goat with the upper part of a man or a woman, the apparition being accounted for by the fact that as a little child the patient had involuntarily witnessed coitus and mentally compared the man with a goat, and further, while staying in the country, had for the first time seen the male organ erected, in a goat; (b) a spotted hyena with the face and upper parts of a woman, the explanation of this figure lying in her recollection of an attendant who had offended her as a child of eleven, and whom she had compared with a spotted hyena, because she wore a spotted blouse and her eyes looked green and evil. In the case of recent impressions, the phantasy always recurred to past experiences of special feeling-tone: that is to say, the patient saw as an animal any person whom she had compared with an animal. A second person, who by reason of some characteristic possessed an imaginary or real similarity to the first, was either merged in the first figure, or was represented by a head attached to the body of the animal, or a particular characteristic was symbolised in some attribute of the phantasy. Each single part of the apparition had to be traced back from the recent experience to the experiences of early childhood.

So, in our interpretation of the Sphinx, where condensation is carried to a high degree, its attributes must be taken singly. Corresponding to the recollections of individuals which in dreams are superimposed one upon the other, deposits from the experiences of successive generations accrue in the formation of the mass psyche.

Folk-psychology takes us back to a time when there was no such great gulf as now exists between man and the animal kingdom. On the contrary the animal was held in special awe, and comparison with an animal was rather an honour than a shame. (In the case of our own children, we note that they find no difficulty in imagining themselves or others to be animals.)

Totemism, the first comprehensive religion of mankind, which made of the animal a divinity, rests upon this primitive attitude of mind. After many thousands of years the totem gave place to the anthropomorphic god, or rather, when we remember that the prototype of the god was the father of the primitive migratory peoples, we may say that the anthropomorphic god resumed his sway. Again, for thousands of years, the animal and anthropomorphic representations of the deity must have existed side by side, and when at last the anthropomorphic god finally prevailed, there must have remained, in spite of the repudiation of the animal-god, the recollection, charged with powerful emotional affects, of the important rôle it once played in religious worship. The animal body of the Sphinx remains as a relic of hoary antiquity, while the human head represents the anthropomorphic god of later times.

The combination of man and beast indicates the drawing of a comparison (*cf.* the case of a patient cited above), but it also reflects an historic process. The difference between individual and collective psychic activity is apparent in the fact that, in dreams, persons from real life are, by a process of condensation, blended with others recollected from early childhood, whereas, in prehistoric art, beings from far-off stages of development are comprehended in a single image with those figures which at the time engage its attention.

The representation of these two historic stages in the conception of the

deity, with its seemingly absurd blending of animal and human, leads us to suspect, according to the psychology of dreams, an element of unconscious mockery. Now it would be quite wrong to connect such a feeling with the overcoming of 'animal' sexuality—nothing was further from the mind of the ancient Egyptian—or with a tendency to deride the animal. Possibly, in the course of a long cultural development, the original high valuation of the animal may have given way to a lower estimation, which in historical times might tend to be treated symbolically after the manner of C. G. Jung, but as regards the early times in question such an anagogic conception, amounting rather to a repetition of a stage in development than an explanation of it, is beside the mark.

In the history of the development of the Sphinx, the political and national history of the ancient Egyptians is reflected. The people of Egypt in the earliest times were no single homogeneous race, but had absorbed many heterogeneous elements. Now tribal and local organisations had for the Oriental peoples, who only at a late period achieved a State organisation, a special significance from the religious point of view. As one god was assimilated to, or replaced by, another, their different characteristics went through a process of condensation. Similarly, in totemism, the totem of one tribe would be combined with the totem of another, and composite figures were formed, of which the Sphinx with ram's head and the griffin were indications of conflict and compromise between old and new, in a long succession in which the human-headed Sphinx was the last product.

Both historical and psycho-analytic methods of investigation make it clear how it comes about that the figure of the Sphinx represents both god and king. Amongst the early races, as amongst primitive peoples of to-day, there is very little distinction between the two. The Egyptian kings were deified and worshipped in special temples, and represented to their people "the mighty god," golden Horus and especially the son of the sun-god Ra. As sign of their divine nature, the prehistoric kings wore the lion's skin (that of their totem animal), long after totemism had been succeeded by a higher form of religion.

To this brief sketch of a phase of religious development belongs the interpretation of the Sphinx as a sun-god. It seems certain that the worship of heavenly bodies originated in totemism, and that the elevation of the gods to the skies took place under the combined influence of natural processes, psychic revolutions and changes in the conditions of human life. Presumably the Zodiac bears witness in its composition to the totemistic origin of astral mythology and religion. The translation of the deities from the earth, their natural home, to the skies, manifestly belongs to a loftier and more advanced stage of religious development and shows a more spiritual outlook.

The elevation of the totems to the skies took place at a time when religion had already progressed from totemistic to higher conceptions of the gods. The totems, no longer answering to any need, could be thrown into the celestial lumber-room. In this connection we may note the fact that this removal to a distance later became a universal euphemistic symbol for death, as is seen in dreams, poetry, folk-lore and mythology<sup>1</sup>.

Now this elevation of the gods betokens not merely an advance in religious ideas, but also an unconscious wish to depose the deities from their rule upon earth: that is to say, as man's awe of the gods rose to its highest point, their removal was desired by the unconscious revolutionary wishes which forced their way up. This expression

<sup>1</sup> Cf. Freud's *Traumdeutung*.



of an increasing ambivalency of emotion (for as such we must regard the translation of the gods to the skies), was repeated when the authority of the anthropomorphic deities became endangered. The ancient peoples could conceive of the gods as walking the earth in bodily form and dying a bodily death; it was later that they were made immortal, dwellers in the heavens.

In this religious conception, the effects of unconscious hate-tendencies and of feelings of love and veneration (strengthened as these were by force of reaction) become clear.

The Sphinx must in some definite way have participated in the long process which made of the animal-god on earth an animal-god in the skies. As Horus was changed from a totem to a sun-god, the Sphinx, his image, may have represented the sun itself, and attributes and functions of the sun-god, incompatible with its original totemistic character, may have been assigned to it. It is amazing how successive features of a long, slow cultural development appear side by side in the figure of the Sphinx, as if the Unconscious of the race, indestructible and immortal, could not wholly divest itself of ideas and feelings long since superseded and laid aside.

In the history of the celestial gods the bird has a special significance. Here we arrive at one of the most striking attributes of the Sphinx: its wings—an attribute seemingly incongruous in conjunction with its lion's body. Doubtless, in the mind of primitive man, wings stood for swiftness, but beyond this obvious interpretation lie others of great moment. Wings were bestowed in ancient religion and mythology, not only upon divine hybrid-creatures, but upon anthropomorphic deities, *e.g.* Mercury, and on the messengers of the gods, *e.g.* cherubim, seraphim and the angels. In the totemistic system there must have been some definite point at which birds, *e.g.* the eagle, were made into totems.

To primitive man, the flight of the bird was a mystery. He was impressed by its swiftness, and its power of maintaining itself in the air, while its disappearance and reappearance may have served to suggest the omniscience and omnipresence of the gods. The later conception of the soul's embodiment in a bird probably arose from the fact that birds were observed to settle upon dead bodies, feed upon them and fly away.

It is likely that the totemistic significance of the bird belongs to a late phase of religious development. The bird winging its way to the sun-god represents the soul, and its flight prefigures the translation or resurrection of countless heroes from Moses and Elijah to Jesus.

It is at present impossible to indicate the precise point at which the bird enters into the totemistic system, but it appears that it had its rôle and task assigned to it in terms of totemism when that system was already declining. Later the bird may have been the theriomorphic representation of the saviour or the hero. The vulture of the Egyptian deities, the dove of Aphrodite, the raven of Wotan, the birds whose flight was of oracular significance, the dove sent out by Noah, the dove of the Annunciation—all these birds were originally gods, who at a later date became the helpers and messengers of anthropomorphic deities.

So too the Sphinx became a winged watcher in the service of the gods, like other more familiar figures. These had their place in the Pantheon before they became mediators between Jehovah and men in the persons of the winged angels whose totemistic origin we recognise in the Old Testament descriptions of their predecessors, the Cherubim.

(Note that the oldest Sphinxes were not winged; the wings only became general in the Greek figures.)

We have been compelled to trace the long and difficult path trodden by primitive humanity up to that stage in religious development at which we encounter it in early antiquity. As the rings in the tree trunks mark the passage of the years, so in the Sphinx figure we recognise signs of long-past stages of development. It is due to the remarkable conservatism of primitive cults that the old did not vanish as the new arose, but was assimilated, transformed, and finally entirely divorced from its original meaning.

It is possible that this consideration may throw some light upon the peculiar bisexual character of the Sphinx figures. We know that male Sphinxes were predominant in oldest Egypt, but that, later, female Sphinxes were found in increasing numbers side by side with the male figures, till in Greece the latter were completely superseded.

How does the appearance of the female type fit in with our explanation of the totemistic derivation of the Sphinx? We conclude that the original male form was, by a process of historical development, replaced by the female, the penis being retained as a relic of the earlier male figure.

In order to make this hypothesis acceptable, we must cite in its support certain facts from prehistoric times.

We know that the present form of the family was preceded by the matriarchy, under which the members of the horde were grouped round their natural centre, the mother. Where relics of matriarchal organisation are still to be found, as in the case of certain aboriginal tribes, we have, even when we make allowance for the manifold changes wrought by the passing of thousands of years, a fairly accurate presentation of the primitive organisation of group-marriage.

It is difficult to detect the influence of matriarchy on religion, for we have no direct approach to that prehistoric stage in human development. Freud suggests that the great mother-deities may universally have preceded the father-god<sup>1</sup>, and two facts seem to confirm this: (1) the relatively late character of totemism, which, judging by its origin, presupposes the existence of the brother-clan, *i.e.* a more highly developed form of the family group, and (2) the improbability that the libido-invested figure of the mother, so long the centre and head of the family, should not have been apotheosised by primitive man.

Nevertheless we must counsel caution in the adoption of the hypothesis of an original mother-religion. The Oriental cults of mother-deities, *e.g.* of Isis, Ishtar and Cybele, and other embodiments of the 'Mater Magna,' originally bore a totally different character from that of the father-religion. Laying stress as they did upon the sexual, the celebration of the fruitfulness of humanity and of Nature, they stand in contrast to the father-religion, which brought into prominence the social motive, and in the consciousness of guilt gave rise to a sort of social fear. Even if we regard these cults as later developments, we must yet assume that in their rudimentary, prehistoric stages they possessed their peculiar characteristic features without any of their subsequent cultural modifications. We do not admit the contention that the difference between the cults of male and female deities rests upon externals, for those very externals, which no later artistic assimilation sufficed to erase or destroy, are the mark of a deepseated difference which has its roots in instinct.

Now in considering the development of the race it is merely a question of nomenclature whether the existence of religion be admitted at this or that particular point, or whether it be dated from some later period. But the social bond and, with it, that powerful agent, a sense of guilt, appear to be necessary and integral parts in the structure of religion. These characteristics are lacking in the mother worship at the time of the matriarchy. Hence we cannot speak definitely of a *religion*.

(Note: the point must be emphasised that the rough indications here given

<sup>1</sup> *Totem u. Tabu*, p. 138.



apply only to prehistoric times: in the ancient mother-cults of the East there is manifestly a genuine mother-religion.)

The mother in matriarchal times was honoured with every indication of sexual-overestimation, typifying the object-choice characterised by dependence. It is certain that through a long period the mother was the love-object to which, above all others, the crude libido of primitive man was directed, and, mainly on account of the urge of heterosexual impulses, she became his idol. It is just here, in this very factor of the initial choice of the love-object and the sexual overestimation, that the difference between the original mother-worship and the primitive father-religion becomes manifest.

As the mother became the idol of the first organisation of the matriarchal period, so the father of the original horde subsequently became the father-ideal to the members of the brother-clan.

From the contrast of *mother-idol* and *father-ideal* we may deduce not only an essential feature of the attitude of primitive man to the archetypes of his religion but the very nature of the object-choice upon which highly important developments depend. That is to say that in primitive times the object-choice of which we find indications in the matriarchal period belongs to that type which is characterised by dependence, while later the narcissistic type assumes prominence.

The libidinous worship of the mother, bound up as it was with the glorification of the crudely sexual, was naturally capable of becoming a religious cult in a more or less sublimated form, but before this could take place the deity as such must come into being, and the father-religion, in the form of totemism, enter into the history of the race.

The deification of the mother took place later, after the pattern of the father-religion. She now appears as the rival of the father, but the latter, as the prototype of every god, could still claim to have been the originator of religion, and this claim does not rest on the primary and unbroken force of the first libido-investment, but on the strength of the longing for the father, subsequently operative, strengthened and deepened as it was in virtue of reaction.

The features of mother and lover, combined in the first love-object, remain blended in the original feminine deities, the maternal aspect becoming more and more strongly emphasised, while the sexual element is forced more into the background or appears in the more spiritual form of universal grace and charity or womanly loving-kindness. Even in the most advanced stage of development the sexual element is never wholly discarded—the goddesses always remain the guardians of love and marriage. Gretchen in *Faust*, addressing her love songs to the Virgin Mary, is only a modern representative of countless sisters of old, who, in a similar situation, fled for refuge to their native goddesses. The matriarchy has originated many an important cultural development in human society: it did not produce religion as such.

In the contrast between mother-idol and father-ideal lie those forces which later, with the greater inwardness of religion, were to assume such importance. The cults of the mother-goddess led to an excessive extolling of the sexual, and only at a very late period did they attain to a partial sublimation, as in the case of the worship of the Madonna. They acted always as the impulse to the overthrowing of the laws, prescribed although unwritten, of the father-religion, for they found constant reinforcement in the springs of passion. The strength of Antaeus as he fought was renewed as often as he touched mother

earth. The father-ideal, viewed as a divinity, became the hidden lawgiver of mankind, its personified conscience, its guard against the storm of passion threatening to break up society.

In the struggle of these principles, one of the most important instances of the invasion of sexuality into the social institution of religion is to be found; the conflict between the mother- and father-religions corresponds to the life-long oscillation of the individual between male and female love-objects.

We have accepted the hypothesis that the father-religion, in the form of totemism, preceded the deification of the mother, and we can comprehend how it is that the Sphinx (originally a male god), now assumes a female form. It is tempting to connect this form with the victory of anthropomorphism and to conclude that, when the totem was to be superseded by a human god, the image of the mother-goddess first appeared. In any case the female Sphinx is a secondary conception, seeing that totemism, of which it is a very late relic, was a pure father-religion, the creation of associations of *men*.

The totem animal had the same characteristics as the prototype of the god, *i.e.* the father of the primitive horde, a stern, powerful and awe-inspiring chief, of whom traces survive in Jehovah. These features could only be transferred to the mother-goddess if we suppose that far-reaching changes had taken place in the relations of the sexes. The picture painted by C. G. Jung of the Terrible Mother is, even if we leave out of consideration his anagogic interpretations, no primary conception, and presupposes definite changes in the psychic relation to the mother. Owing to great modifications in the conditions of life, the tender feelings towards the mother must have undergone a radical change before she became the Terrible Mother.

Considerable light is thrown on this point, in the study of neuroses, by those unconscious psychic processes which lead to the inversion of the Oedipus complex. In such cases the mother appears as a terrible and hateful woman, often indeed a persecutor and tyrant. Analysis shows that this peculiar psychic attitude is a late transformation of the original positive affect, which has taken place under the pressure of definite psychic needs.

Chief amongst the forces which bring about the destruction of the original relationship to the mother, are intimidation in the sexual field on the part of the father and the fear of castration. The intercourse with the mother, urgently desired by the Unconscious, involves for the child the loss of the highly-prized bodily organ. For that reason the beloved mother becomes terrible, an object of abhorrence.

A good analogy to this individual development is found in that of the mass psyche. We may infer that the stern commands of the fathers as regarded incest were first enforced on the younger generations from without, and later became their psychic possession.

The creation of the mother goddesses gave only a partial outlet to the impulse to incest, for, with the deification of the first love-object, which seemed to stimulate to the carrying out in reality of those infantile desires, the long-inherited prohibition of incest made itself unconsciously felt, changing the love-object into a fear-object, and threatening calamity. This process was reflected in the bestowal on the mother-*imago* of the characteristics of the father. The command had issued from the father and was supported by the unconscious homosexual tendency directed towards him.

The fact that the totemistic father-god blended with the image of the mother-goddess indicates that the homosexual tendency, so powerful a factor

in religious development, had frustrated the invasion of the impulses to incest and foiled the attempt to substitute for the dreadful totem god the more lovable image of the mother, for that image, even as goddess, was bound up with the taboo of the incestuous love-object. These homosexual impulses, represented in the Sphinx by the lower parts of the male animal and the later retention of the penis, were transitory. The female nature became more clearly manifest, and the Greek Sphinxes have gracious, gentle faces, very different from the gloomy and grave, masculine type of features of the Egyptian Sphinxes. The animal body continued as a token of their origin and dangerous character.

From this genetic investigation several points have become clear:

(1) it solves the riddle of the bisexuality of the Sphinx figures, emphasising the fact that their formation reflects the process of the supersession of the heterosexual by the homosexual love-object at a later stage of development;

(2) it explains the interchange of male and female figures and connects it with religious development.

This has a bearing on psycho-analysis.

In the penetrating interpretation of the Oedipus myth, contained in Rank's book on the incest complex, he recurs to the infantile sexual theory, demonstrated by Freud, according to which women also are possessed of the penis. Rank also cites the homosexual anxiety dream in his explanation.

Whether these explanations be right or not, our historic interpretation may claim to have thrown some light on the psychic processes which go to the formation of the Sphinx figure.

Our interpretation involves a radical modification of Jung's conception of the Sphinx. A critical review of Jung's exposition shows clearly the inadequacy of the symbolic interpretation of the Swiss School. As in the analysis of the individual, so in investigations into religion, Jung altogether fails to go back to the earliest stages in the development of psychic conceptions. It is probable that at a very late stage of advanced cultural development, the Sphinx was a theriomorphic representation of the libido and is to be recognised as the half-animal portrayal of the mother-imago, in its 'terrible' aspect. But we do not think that this symbolic portrayal furnishes any real explanation, or makes it clear how such a conception as that of the Sphinx was arrived at, or that either the psycho-analyst, or the scholar who makes researches in the realms of religion and culture, can be satisfied by explaining the Sphinx as "an incestuous amount of libido detached from the bond to the mother." For this interpretation by means of lofty modern symbolisation contributes nothing to the explanation of the Sphinx figure of early antiquity, and at the outset refuses to enter into the contradictory constituent elements of that figure or to treat of them in detail.

With the new insight we have gained, we may now return to the story of Oedipus and the Sphinx, and it is to be expected that fresh light will be thrown on the still hidden meaning of the Sphinx-episode in the old myth by a consideration of the meaning of its incorporation there.

We have supported the theory of the common origin of all Sphinx figures, and believe that the Theban monster of the story must be sufficiently true to type for our present findings to have some bearing on the meaning of the dark rôle it plays in the fate of Oedipus. Before we can solve the riddle of its being, we have to find out what the mythologists and philologists regard as

original features of the legend, as distinct from later embellishments and alterations.

It is said by authorities on the subject that the story of Oedipus was at first much more crudely told than in its present form, and that originally the mother was present at the slaying of the father, and, immediately after the murder, was overpowered by her son.

Many points in this story are the subject of controversy. Gruppe thinks it was added to the original myth only with the introduction of the well-known romantic motive: the killing of the monster by the hero who thereby wins the hand of a princess. Other critics assert that the original contest between Oedipus and the Sphinx was one of physical strength, not a trial of wits in the solution of the riddle; others again, that the tale of the suicide of the Sphinx rose out of a late analogy to that of Jocasta.

We may then believe that that version of the Oedipus story is the earliest, in which there was no question of the solving of the riddle, but the hero is represented as slaying a terrible monster which was laying waste the land.

The next question which arises is that of the relationship of this part of the story to the whole myth: is it, as it seems at first sight and as is maintained by most philologists, a mere episode, added later to the essential myth?

The difficulties in connection with the incorporation of the Sphinx episode into the story lie in the fact (noted by Robert), that the Sphinx has been represented as being concerned in the fate of Laios, as indeed the story itself indicates, but the connection is very obscure. If the Sphinx be regarded as the avenger of Laios, it is absurd that the murderer should with impunity slay the avenger. If, on the other hand, she were sent to punish a crime committed by Laios himself, it is equally absurd that she should appear after his death and punish his innocent subjects. So she could only be sent by the god whose Oracle had foretold the fate of Laios, or else we must seek for another motive outside the Oedipus story. Robert thinks no motivation is necessary: the monster is there—to refer its appearance to human guilt is a late and secondary conception.

He would appear to have given up too soon the attempt at explanation. The connection between the Sphinx and Laios is certainly puzzling, but psycho-analysis shows that such a connection has a psychic, and therefore real, motivation.

Again, the parallelism between the slaying of Laios and that of the Sphinx is significant. The Sphinx, a late development of the totem animal, is confronted by the young Oedipus, who slays her and receives the city as a prize. If we believe in the results of our researches into the origin of totemism, we see that, in the last resort, the killing of the Sphinx stands for the murder of the father. Further, in the symbolism of dreams, myth, poetry and wit, the city or country stands for the woman. So that, in the guise of the Sphinx episode, we recognise a second appearance of the same theme: the killing of the father and the rape of the mother.

Again we are confronted with difficult questions. What is the original form of the story, and why should it be re-told in another form? From what psychic motive has the male figure of the Sphinx been transformed into the female?

The emotional content of the Oedipus myth meets with such universal response in human nature that in psycho-analysis it is quoted as typical of the strongest unconscious wishes. But the very frankness with which it is



presented to us in all its crudity, should arrest our attention. We may be on our guard when crudely sexual themes are freely treated in the myth. Nearly always it means that other motives are hidden, and that the emphasis upon, and prominence of, the one sexual theme often serve to hide another part of the content, which has some sexual or sinister motive.

Strip from the story the Oracle, the Sphinx episode and other special mythological features, and what remains? The life and deeds of one who has committed parricide and incest, whose fate could rouse in us no deep feeling of sympathy. Why should this hero have been chosen from so many for immortalisation, so that for his sake the tribunal became the stage?

This consideration, in conjunction with our earlier observations, leads us to suppose that the Sphinx episode is an integral part of the original myth, and the relationship of the one part to the other is defined when we state that the Sphinx plays in the Oedipus myth the same part as the ghost in *Hamlet*.

The Sphinx episode is older than what we may call the 'human' motive in the story, and in it the slaying of the Sphinx has still its primary awful significance. Later this act of superhuman impiety appears in the guise of a hero's liberation of his country, yet, since that act was perpetrated upon a late successor of the totem god, it remains of tragic significance in the fate of the man himself. The murder of Laios was the transgression of a human law, but the slaying of the Sphinx was a crime committed against the deity.

The tragic motive is greatly strengthened by the fact that Oedipus has offended not only against the transitory codes and questionable customs of man, but against the eternal and sacred laws laid down by the gods; he has not only slain his father, but, in him, the authority—the god himself.

To the Greeks, already arrived at the stage of anthropolomorphism, the slaying of the totem did not appear in its overwhelming significance. The Sphinx had, in the course of progress, become a monster, and its slaying, through the inversion of the emotional affect, was looked on as meritorious. Religious feeling had become more sensitive, and no compassion could have been roused for the slayer of a god, therefore another crime was substituted, sufficiently heavy and similar to the original, which yet did not amount to a mighty insurrection against the gods—the crime, that is, of parricide. But the choice of this substitute was no matter of chance. Remembering as we do that the totem itself was a primitive substitute for the father, we recognise in the development of the myth an echo of a real event in primitive times, times long vanished from conscious memory.

So we reach the following conclusion: the myth as we have it does not reflect the primary content of the story, but represents a late return of the repressed material. Some happening, similar to the events of the Oedipus story in its present version, may have been the germ of the original myth.

We understand now that its crude form is not to be attributed to its primitive character, but is to be regarded as a breaking forth of material repressed for thousands of years. Here, as in other myths, we already meet with traces of religious elaboration and change of interpretation. We can never have the pre-religious myth in its pure form, which was allied to animism.

In the Oedipus myth the chief accent has been shifted on to the conflict with the human father. In the psychic realm this shifting of accent is familiar in dreams; that which originally was the kernel appearing as the husk.



We have intentionally disregarded those elements in the story which seem to assign the part of the mother to the Sphinx. Rank has it that the introduction of the Sphinx represents the splitting off of certain offensive features from the conception of the mother. The original overpowering of the mother gave place to the fight with the Sphinx and long afterwards was transferred into a contest of wits. The Sphinx mother puts to the youth, who is struggling to understand the sexual problem, a sexual riddle about the being of man, and only after the solution of the riddle (in the original sense, after the overpowering of the mother), can he consummate the marriage. According to Rank, the Sphinx episode is a reappearance of the rape of Jocasta, interpolated, during the process of repression, amongst the different strata of the myth.

Rank recognises that this interpretation is insufficient and adduces the history of Chrysippus, which is allied to that of Laios, so that the homosexual meaning of the Sphinx is obvious. His hypothesis and our own are complementary, but his seems to refer to a later version of the story.

So we arrive at the belief that the Sphinx story, as we now have it, is a wonderful piece of condensation, accomplished by many generations, which has compressed the slaying of the father and the rape of the mother into a single deed wrought upon the Sphinx.

Homosexual and heterosexual, sadistic and masochistic impulses pass into one another, undistinguished and indistinguishable. We find the explanation in the psychic processes which analysis has brought to light in the individual. The child who witnesses coitus identifies himself with both parents. He wishes to play the part not only of the father but also of the mother. This sadistic-masochistic phantasy corresponds to the first heterosexual and homosexual attachments of the child. The infantile sadistic conception of coitus causes it to appear in the child's eyes as a struggle. So it comes about that he wishes to follow the father's example (according to his own misconception of it), by doing violence to, and overpowering, his mother.

Transferring these observations to folk-psychology, our attention is directed to the alternate ebb and flow of the homosexual and heterosexual wave in the life of peoples—the unconscious hate of the mother allying itself to the love of the father, and *vice versa*.

So the Sphinx may embody these two strong tendencies, for Oedipus, killing his father, committed rape upon his mother, and, assaulting his mother, had for love-object his father.

If we enquire as to the succession in time of these libidinal tendencies, we find that the slaying of the father (the totem), *appears* to precede the rape of the mother. But the component parts of the hybrid figure, in which apparently the lower parts of the male animal are the older, and the female human parts the younger, lead us to infer that here, as in the whole story, there has been a reappearance of some old repressed material. The condensation of the slaying of the father and the intercourse with the mother, which, by the cleavage in the Oedipus story, resolves itself into two separate streams of action, directs our thoughts back to a primitive age of mankind, when the love-choice of the young man was not so decidedly inclined to the woman as now, nor was there so clear a distinction between wooing and fighting—a phase analogous to the anal-sadistic period in the development of the individual.

If then the condensation contains the possibility of a return to this atavistic stage, we must suppose that in the sadistically-coloured phantasy of intercourse with the mother, to which was added that of the interference of the

father, we have the impulse for the creation of the Oedipus myth, which is nothing but the objective hallucination of wish-fulfilment.

From individual analysis we know that this formula corresponds to the biogenetic law, for the child at the outset finds in phantasy the fulfilment of the wishes which are denied to him in reality.

Having traced the Oedipus myth to its original germ—the phantasy of forcible intercourse with the mother, we are not surprised to find in its latest versions an indication of its derivation:—that dream chosen by Freud as starting-point for his analysis, of which Jocasta speaks in Sophocles' play: "Many a man in dreams has seen himself mated with his mother." Freud then is right in maintaining that the Oedipus story sprang from a primitive dream content.

The condensation which we have indicated could only have been effected when there was no longer a psychic reaction towards the slaying of the father in fact, and the original myth had already been created. Accordingly, the rape of the mother, represented simultaneously with the slaying of the father (the totem animal), in the overcoming of the Sphinx amounts to the recurrence of the wish which gave the impulse to the creation of the myth.

With the reappearance of this theme, dividing as it does, the Sphinx figure into those of Laios and Jocasta, we find again the hostile and the tender impulses of the young hero towards father and mother. As in the Sphinx episode, intercourse and murder coincide in a single deed wrought upon a single object, so in a pre-Sophoclean version of the myth, Oedipus takes from his father's body his girdle and his sword. To remove the girdle is a well-known erotic symbol of Greek antiquity, while the taking of the sword symbolises castration. Here again we have the combination of conflicting feelings directed towards a single object.

We mentioned above that in dreams the creation of phantastic composite creatures, such as the Sphinx, indicates hidden feelings of derision or contempt on the part of the dreamer. If we apply this rule to the mass psyche, we should expect to find some analogy to the remarkable hybrid creatures of ancient art. Possibly the mixture of animal and human in the Sphinx corresponds to the opposition felt towards totemistic deities in a time of cultural advance when the gods were conceived of in human form. Again, the combination of male and female parts would reflect an unconscious revolutionary impulse against the father-god, heterosexual libido-tendencies being opposed to the religion based on homosexuality.

The Oedipus myth was of extremely weighty significance in the religious life of the Greeks, and the performance of the Oedipus drama stood in intimate relationship to their religious ritual. The deep and lasting influence of this myth in antiquity is due to this religious motive showing as it does human passion in collision with divine laws. At the Dionysia and in the ritual of Attis, Adonis and Osiris, a young revolutionary saviour is represented as paying an awful penalty for his offence against the mighty father-god. A parallel may be found in the effect upon the faithful in the Middle Ages of the Passion Play of the Church: an effect due to the same psychic processes. The history of Christ is not unlike that of Oedipus as saviour.

In the Oedipus myth the hearers' unconscious sense of guilt was awakened. This goes to confirm us in the belief that the germ of the myth is the same as that of the Bible story of original sin. In Assyrian and Babylonian art the

Sphinx is represented as guarding the Tree of Life. In the story of the Fall of Man this guardianship is assigned to the cherub, whose original animal form we recognise in the Vision of Ezekiel. In this tradition of the Tree of Life, precisely the same condensation has taken place as in the Sphinx episode in the Oedipus myth, the Tree playing in the Bible story the same apparently non-essential rôle as does the Sphinx in our myth. Hence the Oedipus myth may be called the Greek story of the Fall of Man.

## ABSTRACT.

INTERNATIONALE ZEITSCHRIFT FÜR PSYCHO-  
ANALYSE, 1920, PART 2.

This number of the *Zeitschrift* opens with a short article by Abraham, on "Prognosis of Psycho-Analytic Treatment in Middle Age." He begins by quoting Freud's opinion, from one of his earlier works, that after a certain age the success of analysis is very doubtful and goes on to say that in most cases this is certainly true. But psycho-analysis is full of surprises and it is undesirable to approach any of its problems with *a priori* expectations. Psycho-analysis itself must be used as an instrument of research to ascertain whether and under what conditions success can be achieved with patients who are no longer young.

Having undertaken several analyses of patients over 40, and of some over 50, years of age, the author finds that a considerable number react very favourably to psycho-analysis and that some of his best successes are amongst them. His first case of this type was a man of 50, suffering from melancholic depression, who was relieved in five months and became able to resume his work, after various fruitless attempts at cure by other methods. The neurosis had assumed its severe form 15 months previously, although there had always been a nervous disposition and there were evident signs of a chronic tendency. Other cases followed, including two cases of obsessional neurosis, in men of 50 and 53 years respectively. Excellent results were obtained with both, and also with a woman of 41 years. They had all shown symptoms since childhood, but in all cases the neurosis had not developed to an incapacitating extent until between the ages of 30 and 40. There were similar successes with other cases, and also a number of failures and partial successes.

From these facts it became apparent that the explanation of such different results in various cases is a simple one. Good results may be expected when the neurosis does not break out in full severity until some considerable time after puberty, and when the patient has enjoyed a comparatively normal sexual life, and been capable of normal social activity, for some time. The unsatisfactory cases are those of patients who already showed well-developed obsessional symptoms, etc., in childhood. But patients of this class, even at an early age, provide most of the failures in analytic treatment, and the conclusion is that the *age of the neurosis* is a more important factor in determining the probability of success than the age of the patient. This corresponds with experience in the psychoses.

The question arises as to how far it is possible to retrace and revive the infantile sexuality in such patients; experience shows that this is by no means impossible, and in some cases can be achieved to an extent only to be expected in very young patients.



Many of these cases differ in one point from the usual type under analysis, namely, in the lack of initiative frequently shown by them. They have to be prompted to begin the communication of their ideas at the start of each sitting. They seem unable to find their thoughts independently, but any little remark will set them going. In this respect they are *infantile*, and this characteristic is also common in the analyses of children, but in them often vanishes when the negative transference is uppermost. Abraham also calls attention to the problem as to why certain cases of neurosis in children prove unamenable to treatment, and he remarks on the desirability of obtaining further evidence on this point.

The next contribution is a small one, in French, from de Saussure (Geneva), called "Le Complexe de Jocaste," in which he raises the interesting problem of incestuous love on the part of a mother for her son. He remarks that Freud has dealt very fully with the Oedipus-situation, but has said nothing of the corresponding attitude of Jocasta, the mother of Oedipus, in her incestuous love for her son. The author gives details of two cases observed by him of obvious infatuation, hardly distinguishable from sexual desire, on the part of a woman for an adult son. He thinks it is important to establish a definition of the distinction between normal maternal love and a mother's incestuous attachment to a son, and makes various suggestions towards such a distinction, particularly, that normal maternal love is dominating and protective, whereas in the cases of sexual desire for the son he sees a more wifely dependence and submission (masochism and exclusivism).

These questions are extremely interesting in themselves, and it is unfortunate that de Saussure's knowledge of psycho-analytic theory and research does not appear to have been sufficient to enable him more fruitfully to investigate the cases under his observation. Freud of course has taken Oedipus as a type, representing the primary experience and unconscious foundation of heterosexual love in every man. Jocasta is hardly a simple universal type of this kind, since in infancy no woman is the *mother* of a son to whom an incestuous fixation of *Libido* can be attached. So that a Jocasta-complex can never be a primary infantile experience as the Oedipus-complex is. The nearest approach to it would be the case of little girls who 'mother' a younger brother and also make him the object of sexual impulses, probably by a transference from the father, but this case would be complicated by the Electra-complex.

Apart from this, however, psycho-analytic literature is not wanting in references<sup>1</sup> to the fact that children of one sex always become unconsciously associated with the parent of that sex, and that a woman's love for her son is closely bound up with her father-fixation. Probably every analysis gives proof of this transference from the parents to the children of a given person. The author has arrived at this possibility, but it is not clear why he designates women with a father-fixation as 'homosexuelles.' His question as to the distinction between normal maternal love and incestuous attachment ignores the fact that this distinction is, in every relationship, sexual or otherwise, a matter of the degree of *consciousness* of the underlying sexual attraction and not of the degree of intensity of love, in itself; since every human relationship of any kind with another person will fall into line with, and be founded

<sup>1</sup> Ernest Jones, *Papers on Psycho-Analysis*. "The Phantasy of the Reversal of Generations," p. 659.

on, some infantile sexual situation in the Unconscious<sup>1</sup>, in most cases an incestuous one. Moreover, the maternal instinct is part of the sexual instinct in woman, and is largely a sublimation and further development of the partial-components of her sexual instinct (anal-erotism and various kinds of *activity* in other impulses); so that in this way it may well happen that a fixation on the pregenital phase of development might show itself later in an abnormal fascination, instead of in normal love, for a child.

The author's suggestion, that normal maternal love is protective, is true, but not exclusively; for as a boy becomes a man his attitude to the mother gradually assumes more and more an active character, so that 'protection' may be exercised by both mother and son, in varying degrees, according to the case. The exclusivism which he sees in these cases is likely to be related to the father-fixation or to narcissism, but the masochistic traits to repressed sadism (regression to pregenital phase), rather than to any approximation to a wifely attitude (genital phase) in the woman. But the results of analyses of cases such as he describes would certainly be interesting and valuable, particularly as, so far as we know, little or nothing has hitherto been published on the subject.

The study entitled "An Unconscious Phantasy of Pregnancy in a Man under the guise of Traumatic Hysteria," by Eisler, which was published in part in the previous number of the *Zeitschrift*, is here concluded. This is an extremely interesting and remarkable case, and is very well presented. The main interest of it depends upon the very strongly accentuated anal-erotism of the patient; Eisler's report extends our knowledge of this impulse and its development, together with that of the character-traits derived from it. He reminds us of two of Freud's studies (of obsessional cases) and of Ernest Jones' works on this subject<sup>2</sup>, and points out the value of further research.

The patient in this case was an employee on the tramway service, aged 33; 2½ years previously he had fallen from his car and been taken unconscious to hospital suffering from injuries to the head, arm and side (all on the left). They proved to be slight, but an X-ray examination was made of the left side. After recovery and resumption of work the neurosis developed; it consisted in attacks of pain in the left loin, which increased with time in frequency and severity until he was quite incapacitated by them. After all attempts to discover organic injury had failed, the case was diagnosed as traumatic hysteria and sent for psycho-analysis. In spite of some difficulties the case proved very suitable for analysis which effected a cure in seven months.

A strongly-marked transference evinced itself in two peculiar symptomatic acts which occurred in the first few days of the treatment. One of these was an ostensible fainting-fit, in which the man fell *on his face* beside the doctor, thus betraying his passive-homosexual tendencies. The other had a similar meaning; in fact a feminine attitude towards the doctor governed all the transference-manifestations. As the analysis proceeded the emphasis on the fall from the car as an important occurrence gradually declined, and a subsequent event came more and more into the foreground of the picture. This was the X-ray examination of his left side performed at the hospital. It turned out that on this occasion the patient had been very much excited and nervous beforehand, and very much disappointed with what actually occurred.

<sup>1</sup> Freud, *Neurosenlehre*, IVte Folge, p. 394.

<sup>2</sup> Ernest Jones, *Papers on Psycho-Analysis*, pp. 540 and 664.

In his anxiety he had expected that some kind of operation would be there and then performed, or at least that the doctor would suddenly plunge an instrument into his side! The whole affair had rapidly fallen out of conscious importance, but became a crystallizing-point for a passive-homosexual wish-phantasy, subsequently expressed by the hysterical pain attacks in the left loin.

These attacks were described as follows. About 24 hours before one came on, he would become restless and silent and extremely irritable, especially to his wife; as time went on he could not endure her near him. He showed marked defiance and treated his illness as his private and personal affair exclusively and resented any enquiry as to his condition. (The resentment at intrusion into anal-erotic pre-occupations.) As the attack came on severe constipation set in, which no drug was able to relieve. On the following day the pain in the left loin began, and in a few hours became so overpowering that he could neither sit nor stand. He had to lie on his left side with a little pillow under him, but could not keep still owing to the pain. After a time he would feel a thrill going through his limbs; then flatus would pass and, lastly, an evacuation of the bowels would occur.

This description eventually suggested to the analyst the idea that the attack could only be an unconscious *imitation* (by the neurosis-mechanism in which the anal-impulse played the leading rôle) of a *confinement* (the constipation being a conversion-symptom of a pregnancy); it appeared to be closely connected with the X-ray experience. As a child of ten, the patient had heard a neighbour's wife groaning and shrieking in childbirth for two days, the doctor at last having had to extract the child with instruments. He had been able to look on through the window and clearly remembered the scene; a very dim recollection came back to him of the dead dismembered child in a basin. Analysis further revealed the left loin as a symbolic substitute for a female genital organ (left=female), possibly in part through the prehistoric association of loins with procreation ('child of his loins,' etc.), also seen in the myth of the creation of Eve out of the rib of Adam. The patient recalled how on two occasions as a boy, he had fled from his irate grandfather and been overtaken and thrashed while suffering from a violent *stitch* in the left side. At the age of 15, on account of diphtheria, he was given an inoculation of antitoxin with a hypodermic needle in the *left side* by a doctor. Other details pointed to a strong accentuation, during puberty, of the anal and passive-homosexual impulses.

Before going on to discuss the infantile origin of the neurosis from the external (accidental) aspect, Eisler goes in detail into the constitutional aspect, and describes the extent and importance of the anal-complex and previous anal-symptoms in the case. In character, the patient showed many traits which we know to be derived from this complex.

He was a practical man, with a strong 'sense of reality,' and a good memory, with definite ambitions and reasoned opinions. He had greatly improved his position by prudence and foresight in changing his occupation. He had a passion for collecting, for keeping diaries and 'commonplace' books, and for accumulating old menus and bills, which were kept in pedantic order. He 'kept in his head' a great deal of useful knowledge which he liked to impress upon others. He was greatly interested in biological problems and theories of 'creation.' His dearest wish was to settle on the land and breed poultry, one which the analyst thinks he will probably carry out. He was first apprenticed to a baker where he enjoyed the kneading and moulding of the bread and learnt cooking. Later he became an assistant in a chemical laboratory



where the aromatic scents and odours of the drugs pleased him. His attitude to money revealed the anal-erotic in one respect only: he disliked dirty paper-money so much that he would overcome his economical nature to the point of spending it needlessly, if he did not give it to his wife! As regards time, he was extraordinarily sensitive, punctual and exact, and so economical that he loved to 'do two things at once,' to read while eating, to think while walking and so on (which Eisler remarks was known as a characteristic of Caesar's); this was traced back to a pleasure in performing defaecation and micturition at the same moment. Also the patient had a compulsion to do everything thoroughly, which extended to a dislike of anything not *whole* and complete, anything mended, or previously used by another person. These two last points Dr Eisler recommends to Dr Ernest Jones for inclusion in his paper on *Anal-erotic Character-traits*.

The pleasurable interest in the defaecatory act had been early sublimated into character-traits, but the libidinous interest in the product had been less successfully resolved. It was clear that this anal-interest had played a dominating part and had coloured the whole of the infantile sexuality. The curiosity-impulse was related entirely to faeces originally, and later to its substitutes, and was connected with the frequent confinements of his mother. The sadistic impulse was also related exclusively to the anal-product and its derivatives (children), connecting with death-wishes against younger brothers and sisters, evinced in many symptomatic acts and in several 'accidents' while he was a tram-car driver. ('Compare 'the dead dismembered child' previously mentioned.) The smelling-complex was likewise here connected, as it always is; but although the patient had no dislike of the odour of faeces he was extraordinarily sensitive about the odour of decomposition (he could detect the presence of a corpse in a house he was passing), this also connecting with death-wishes, as did his mouth-erotism too. He could eat nothing which was unconsciously associated with anything dead; he was nervous about being poisoned (a fixed impregnation-symbol). Various symptoms and acts connected with the mouth and teeth pointed to their constituting substitutes for anus (cloaca) and child. The flatus-complex also pointed in the same direction: through the association of flatus with thought he believed he had a prophetic gift—that he could foretell the weather, or the arrival of a stranger (= child) and so on.

In the first year of his marriage, seven years before, the patient had suffered from a severe hysterical disturbance of the bowel function. He would be seized by an irresistible need to defaecate and be forced to leave his car for the purpose, only to find himself unable to pass a motion. He was subjected to every possible kind of examination for this malady but no disease was discovered. The symptoms gradually changed to an extremely severe and obstinate form of constipation which finally threatened his livelihood, after which it gradually subsided. Numerous means were employed to relieve it, but only one satisfied the patient, and this was the introduction of pessaries into the rectum by a doctor. This mono-symptomatic hysterical illness was elucidated by the analysis and found to be the expression of the unconscious wish that a child should result from the marriage, although actually he had decided not to have children until later, when he could better afford it. Various circumstances in connection with his marriage were of importance, notably that his mother was at the time confined of her youngest child. His desire for children was limited to male offspring, which pointed to a strongly narcissistic tendency in the wish (as opposed to the hetero-sexual desire for a child of the opposite sex). The nervous constipation represented the conflict about the hoped-for child—it must be 'postponed.'

As further evidence of the paramount influence of the anal-complex the author describes in detail the peculiar *reserve* characteristic of the patient. This proved the main expression of the resistance in the analysis, but was already constitutional in the case and not elaborated for the purpose. Eisler points out that *hate* has received more attention from psycho-analysts in its connection with the development of control of the anal-function, but that as a psychical accompaniment *reserve* actually takes first place. He remarks that this trait is capable of most extensive adaptation to the other psychical



constituents, for we recognise several kinds of it—a proud, a modest, a self-conscious or a mocking reserve, and so on. It may be that in paranoiac dissimulation we have another form of this reserve.

As regards the accidental (external) influences in childhood bearing on the formation of the neurosis the following points may be noted. The patient was the eldest child of 14; his first sister was born when he was six years old. He was jealous of the pleasure her arrival caused the parents (wish to be a woman). He had been the unwitting cause of an accident by which a younger brother met his death. The grandparents, of peasant stock, lived with the family and were more significant than his own parents to his childish mind. The grandfather, whom he much admired and envied, ranked as his earliest object-love; later the grandfather played the part of 'rescuer' by saving the boy's life from a mad bull. The grandmother began his upbringing and from her emanated the first castration-threats. (It appeared that at nine months he gave up his oral-erotic pleasures—thumb-sucking—in consequence of her treading on his thumb!)

The event which was actually of traumatic significance took place soon after he was three years old; this was a scene in which his mother threw a knife at him which cut his head open. She bathed the wound and laid him at the foot of her bed, where new-born children are laid. The effects of this were far-reaching. It seems probable for one thing that it put an end to the phase of infantile onanism, this time again by an injury inflicted by a woman. The head-injury must also undoubtedly have had the effect of activating prematurely the latent masculine narcissism, resulting in the first *Libido*-fixation. That there was such a fixation was proved in many ways. Sublimation of both narcissism and homosexuality was shown in the great interest the patient took in trades-union and similar movements, with the object of improving his own position along with that of other men. After his cure he became a leader in his own union where his word was respected. He showed great moderation in his views and knew how to influence others in the same direction. He showed no aesthetic tendency; Eisler points out that he belonged to the type of active thinker and was entirely lacking in the necessary self-observation and criticism which leads to appreciation of style and form.

This masculine narcissism was evident in his attitude to women, which was highly depreciatory; he objected to their emancipation, would allow them no reasoning power or educational ability (the 'castration' experiences!), though he himself had signally failed to train his youngest sister and his wife's illegitimate daughter, owing to his impatience with the sex; but he attributed this to their natural inferiority. He never allowed his wife any part or knowledge in the plans and schemes which made up his life. Jealousy of women was very marked; he could never resign himself to the fact that the forming and bearing of children had been entrusted by nature solely to the female sex. He had phantasies of being self-begotten and created, which the author compares with those of the very similar Schreber case, described by Freud, of paranoiac delusions of being a woman impregnated by divine rays. The patient's dreams were markedly egocentric and his hypochondria pointed in the same direction.

Even so, it appeared that the masculine narcissism had been forced to accommodate itself to the presence of another predominating impulse. As we

<sup>1</sup> This is interesting as an indication of an inherent disposition to connect the two ideas of bodily pleasure and bodily loss or injury. J. R.

have seen, the strength of the anal-erotic impulse, by inborn constitution (not, like the narcissism, called forth by an external occurrence, the head-injury) was sufficient to penetrate and colour all the other impulses. One such strongly accentuated impulse can often interfere with the development to the narcissistic stage, on which all the partial-impulses are to be co-ordinated with the Self as Object, even though some event, such as the head-injury, has otherwise induced the onset of this stage. This state of things is no doubt more or less typical, since we have reason to presume a second stage (pre-genital) of anal-sadistic interest between the narcissistic and the genital stages of development. From all which, we see the enormous importance of anal-erotism in psychical development.

Every neurosis is, in a certain sense, a subduing, auto-erotically effected, of desires which, being unrealizable, become incapable of entering consciousness. Such ideas in this case were the homosexual phantasies and we know from the symptoms that the anal-erotism here again proved stronger than the masculine narcissism, which would otherwise have mastered these phantasies. For we may assume, *a priori*, that the narcissism must adjust itself in some way to a passive-homosexual wish before a neurosis can result. This struggle was fought out on the field of the castration-complex. The anal-erotism, the interest in 'giving-up,' is transferred from the faeces on to the penis and makes the sacrifice possible. Later reinforcements come in the castration-threats and in the knowledge of the missing penis in woman. As further evidence that the neurosis-mechanism forms itself along these lines, Eisler instances two observations; first, that symbols of excreta, hair, nails, teeth, etc., are also castration-symbols, and secondly, that in all cases of unconscious passive-homosexuality the signs of any psychic defeuce against the castration-threat are noticeably absent. This state of things is due to the success with which the infantile psyche has adjusted itself to a traumatic experience, from which Eisler infers that the auto-erotic tendencies have not merely a preparatory, but also an adaptatory, function.

In conclusion, this case was not, as was at first supposed, a traumatic 'Accident'—neurosis (fall from the car), but arose out of a harmless experience (X-ray examination) which re-activated, by means of a strong anal-erotic impulse, passive homosexual wishes active during childhood and puberty. The hysterical attack was an imitation of a confinement, witnessed by the patient as a child, in which the exclusion of all recollections of his own mother's frequent child-bearing was reproduced. This had, however, largely contributed to the enormous development of the anal-erotic impulse in conjunction with the passive-homosexuality. (Identification with the mother.)

Although the *Libido* at the disposal of consciousness had sufficed to ensure a comparatively normal sexual life to the patient, the symptoms arising from the repressed wishes had become so intolerable as to enable him to go through the work of analysis to a successful end.

All those interested in the aberrations of the psyche will find this study a fascinating piece of work, most capably executed.

"Examination-fears and Examination-dreams" is the subject of a short article by Sadger (Vienna). He remarks that W. Stekel first pointed out that examinations in dreams stood for tests of sexual capacity. These dreams never refer to any real examination which has not been successfully passed, and this has led to the conclusion that they are 'consolation'—or 'reassuring'—dreams.

Freud supported this view from his wide experience, but Sadger submits that more lies behind.

Analysis of a case of dementia paranoides in a young man of 25 furnished some remarkable material on the point, as often happens, the content of the Unconscious being so much more accessible than with psycho-neurotics. The patient suffered from delusions of persecution and hallucinations of ghosts and spirits, and lived an isolated life, withdrawn into himself. He had always been closely attached to his mother and the castration-complex was very marked. Until puberty he had occupied the same bedroom as his parents. After being one of the best pupils at school he suddenly acquired, at the age of 14 or 15, a terrible dread of examinations. Everything would be in his head till he was asked a question, then his mind became a blank, until he was passed over, when he again knew everything. Being asked questions was 'like receiving a blow on the head.' At the time of the analysis he became dumb with fear if asked a question, which was the reason of his isolating himself and avoiding the society of others.

The patient in the analysis spontaneously revealed the meaning of these symptoms in words which were taken down and are reproduced in the article. "I think the terrible fear that I have, which makes me incapable of concentrated thought and prevents me from answering questions according to my knowledge, is my terrific castration-fear. At bottom, though, this fear is a longing and that is why I cannot answer—I run the risk of being castrated. It is a fear and a desire at the same time—I have exactly the feeling that the utter vacuity in my head is as if something had been cut away from me." In subsequent communications the patient established the identity of the teacher, and the pursuing spirits of his hallucinations, with the father, and arrived at the meaning of the unknown question which he could never answer.

From this and other cases the author believes that observation of parental coitus is one of the most frequent causes of castration-fear and of nocturnal enuresis. The patient traced back to sex-curiosity much of his interest, and his incapacity, in study. The fear of examinations is the fear of castration, and the questions which are dreaded are:—how does the father perform the act with the mother? what is the mother's organ like? and how can one find the way to it? According to Sadger, in the dreams an examination-test which has been successfully performed, in reality, replaces the coitus which in infancy had been successfully performed with the mother in phantasy.

There follow nine short notes from various sources describing incidents observed among (normal) small children, or sayings of theirs, which plainly demonstrate the truth of psycho-analytic conclusions about infantile sexual desires and emotions. All are interesting and instructive, particularly the last, which is actually a song to the beloved in lyrical prose, by a quite healthy little girl, to her rubber teat. "When I went to school they would have laughed at me, they don't know how good it is to suck you....I always thought there was nothing so lovely as sucking you. And yet there is; and it is, to kiss someone whom one really truly loves....You can't say how lovely you feel all over your body when you're sucking...you are away from the world, quite contented and happy. It is a wonderful feeling...you want nothing but peace, uninterrupted peace....It is unspeakably lovely. Some kisses are like it, and anyone who knows that can tell the joy of sucking, but if all kisses were alike, no writing could describe it."

JOAN RIVIERE.



## NOTES ON RECENT PERIODICALS.

*The International Journal of Psycho-Analysis*, Vol. I, part II, 1920.

This number contains a translation of Freud's paper on "The Psychogenesis of a case of Female Homosexuality," an abstract of which appeared in the October number of this *Journal*. It also contains Dr Ernest Jones' paper on "Recent Advances in Psycho-Analysis," which we had expected to see in part I. Our readers are already familiar with this masterly summary of recent psycho-analytic work; and this they owe to Dr Jones' courtesy in allowing its publication in this *Journal* before it appeared in the *International Journal of Psycho-Analysis*.

Pierce Clark of New York contributes "A study of Primary Somatic Factors in Compulsive and Obsessive Neuroses"; but, as the Editor points out in a footnote, "all the symptoms mentioned by Dr Clark would be considered by other psychopathologists to belong to anxiety-hysteria." Pierce Clark's contention is that in the compulsive and obsessive neuroses we may find "somatic defects of instincts" underlying, and prior to, the introversion of libido revealed on analysis. The neurosis is a developmental unfoldment of such defects of instinct. Tone deafness, colour blindness, lack of appreciation of rhythm, and incapacity for graceful gesture or movement are instinctive defects of this kind. They are, in a sense, organic inferiorities, but unlike those postulated by Adler, they are trait or faculty inferiorities rather than inferiorities of particular organs.

Defects of this kind lead to difficulties in social adaptation, especially in the period of adolescence, and give rise to various forms of character distortion which compensate for the original inferiority. In all the cases examined, Pierce Clark found an inborn defect of the social instincts, and he advocates that in the training of children every trait of emotional expression should be cultivated to the utmost. "The child is to be given as definite a training in emotional expression as that of the discipline of nursery ethics."

E. R. Mason-Thompson gives a condensed report of a case of simple phobia and obsession in which the symptoms were interpreted as "an unconscious infliction of self-punishment for the wish of her father's death." The elder sister had taken the place of the mother in the father's affections, and the jealousy and revenge of the patient were directed against the sister rather than against the mother. The idea of taking the sister's place (and hence the mother's place) with the father was superseded by the idea of revenge on the sister; and this could best be accomplished by removing the father.

"A Note on William Blake's Lyrics" by Dr J. W. Preger of Hilversum, Holland, is an example of the psycho-analytic interpretation of works of poetic genius—a mode of interpretation which, in some minds, arouses more resistance than any other application of psycho-analysis.

A few notes on points arising in actual analyses are contributed by Mrs Riviere, Dr Ernest Jones, and C. P. Oberndorf of New York. "Reviews of Recent Expository Books on Psycho-Analysis," and "Reports of the International Psycho-Analytical Association," complete the contents of this number.

*The Journal of Neurology and Psychopathology*, Vol. I, No. 2, 1920.

William Brown writes on "Some Factors in Psychotherapy." The factors which he enumerates are *re-association* or *psychosynthesis*, *psychocatharsis* or *abreaction*, *autognosis* (self-knowledge), *regression*, *transference*, and *suggestion*. Dr Brown found, in dealing with his 'shell-shock' cases, that the beneficial effects of re-association were augmented if, at the same time, the accompanying emotion (fear) could be recalled in all its original vividness. "The continuation of the symptoms was incompatible with the reinstatement of the original fear which had been their apparent



cause." So long as it was 'bottled up' the fear could show itself only indirectly in the form of symptoms. Dr Brown thinks the facts point to "an actual persistence of a past emotion in the unconscious, under certain conditions of conflict and repression." His results were obtained by means of light hypnosis. It would be interesting to know what he means by light hypnosis, for he draws a distinction between hypnosis and suggestion. He seems to accept Janet's view of hypnotism, namely, that it is the reproduction of a hysterical somnambulism in a hysterical subject. Hypnosis, he thinks, implies a definite break in the memory continuum—a definite dissociation. He implies that increased suggestibility can be obtained without dissociation.

The practise of autognosis seems to correspond to the methods of Dubois and Déjerine, and "differs from psycho-analysis in all its forms." The value of autognosis as a factor in psychotherapy will probably be found to depend on the answer to the question, How far is autognosis—true self-knowledge—possible without psycho-analysis? In a certain class of cases Dr Brown says autognosis "may give findings that correspond with the theories of psycho-analysis. In such cases it should, of course, be called psycho-analysis." There are many objections, however, to calling any method psycho-analysis which is not psycho-analysis. The technique of psycho-analysis and the technique of autognosis are not at all the same, and, on the practical side, at least, what is and what is not psycho-analysis may be known by its technique.

Of the factors of regression and transference Dr Brown here says little, but he promises a further discussion of transference in another place.

"The Acute Confusional States in the Psychoneuroses," by W. Johnson, is a paper on states of confusion observed in an Army centre for psychoneuroses. The cases are divided into the *mildly confused group* and the *severely confused group*. In those belonging to the latter group the confused state was profound, and usually persisted from seven to ten days. Emotional disturbance was found to be the main aetiological factor in the cases observed, not more than 5 per cent. showing any clinical evidence of concussion of the central nervous system. The cases observed ranged from those of simple type, with a short confusional period, to those of definite mental disorder—"acute confusional insanity."

"The Nature of Insomnia in the Psychoneuroses" is discussed by R. G. Gordon. The deflection of attention from the stream of consciousness is recognized as the main psychological factor in the onset of normal sleep. In the neurotic, owing to mental conflict, and the need for keeping painful memories out of consciousness, complete relaxation or deflection of the attention, conscious or unconscious, is impossible. An effort of attention, conscious or unconscious, is needed to keep the painful thought out of consciousness. The fatigue induced by this effort may cause 'fatigue sleep,' but as soon as this occurs the barrier which has been set up between consciousness and the painful thought breaks down, and if the painful complex can find expression in consciousness in the form of a terrifying dream the patient may awake. He then immediately reimposes the barrier, and sleep is impossible until fatigue again comes into play, and so the process goes on all through the night.

Dr Aldren Turner reviews the work of Redlich and Pierce Clark on *Epilepsy*. He is favourably disposed towards Pierce Clark's work of which he gives a précis, but he is of opinion that a "much fuller understanding of the mechanism of epilepsy and of its root causes is necessary before the purely psychogenic causation of this disease can be accepted, and its treatment by psychotherapy regarded with assurance."

*The Journal of Neurology and Psychopathology*, Vol. I, No. 3, 1920.

The third number opens with an interesting and timely article by Professor C. Lloyd Morgan on "Psychology and the Medical Curriculum." He pleads for the introduction of psychology into the curriculum of our medical schools for some students, if not all. It should be officially taught by those who have made a special study of this department of scientific knowledge and know, and can show, at least

in broad outline, how it may be applied in professional life. The one-sided training of the medical student is emphasised, and cogent reasons are given why every practitioner should have some knowledge of psychology, and why this knowledge should be imparted by a trained psychologist—not merely a specialist in psychotherapies. This teacher must be “a psychologist who has been trained not only in a school of philosophy but also in a school of biology....He must know not only about the emotions but about internal secretions....If he himself be a member of the profession, so much the better; but he must be a psychologist.”

In the course of his paper Professor Lloyd Morgan makes some criticisms of Psycho-Analytic theory. “Here the trouble is that one has to grapple with new technical terms, some of them founded on metaphor and mythology, and with old terms used in quite unfamiliar ways.” In speaking of the Freudian theory of dreams, he says, “There are, I should contend, unconscious psychical *processes* ...but there are, in the unconscious, no ideas, no re-presentations, no memory-images, such as are developed in consciousness and there only,...ideas or memory-images are no more preserved, as such, in the mind, than sounds, as such, are preserved in the gramophone record. Only the conditions of reproduction are preserved....If I am right, there are no phallic ideas in the unconscious. We may cleanse these Augean stables. The latent dream is a bit of sheer mythology.”

“Education and its rôle in the Prevention of Neurosis” is discussed by J. Ernest Nicole. The education which the writer desiderates is based on knowledge which has been acquired by psycho-analysis and ‘analytical psychology.’ The importance of the unconscious and the significance of the primitive tendencies and their possible fates are insisted on from the Freudian point of view. Jung’s theory of ‘the types’ is also drawn upon as a possible source of help in the training of the child. “Thus, in order to prevent deficiency of adaptation from, say, an excessive extravert character, the developing child should receive an education tending towards introvert characteristics.” But the application to child-education of Jung’s constructive psychology is stated to be rather problematic “on account of the infancy of the subject and the element of uncertainty that still clings round its results.” The writer blows hot and cold on the question of sublimation: “we will next attempt to urge and direct a particular child in the paths of sublimation more fitting to its mental attributes. We must never forget, however, that a sublimation cannot in any case be forced.” But, if it cannot be forced, why urge?

“The Neuropathic Individual as a Social Unit” is the title of a Critical Review by Henry Devine. His purpose is to indicate some directions in which the present-day interest in the social aspects of psychiatry is finding expression. He deals chiefly with the view of ‘mental contagion’ put forward by Pierre Janet in his paper on “*Les fatigues sociales et l’antipathie*” (*Revue Philosophique*, Jan. 1919). Janet contends that those in constant contact with neuropathic individuals tend themselves to become neurotic. This he explains by the production in them of lowered psychological tension due to the prolonged strain of dealing with the whims and exactions of neurotic patients.

Dr Devine thinks Janet’s explanation incomplete and unsatisfying, and would refer the nervous symptoms of those living continually with neurotics to “a pent-up libido in which the mechanism of regression comes into play.” The whole personality has to be subservient to the caprice and will of another, and every natural impulse and tendency to self-expression has to be curbed. The evil effects of this would be especially pronounced in the case of a child with a neuropathic parent.

*The Psychoanalytic Review*, Oct. 1920, Vol. VIII, No. 4.

This number is almost entirely devoted to the records of cases of War Neuroses and Psychoses. Karl M. Bowman gives an account of a case seen and analysed by him at Maghull Red Cross Hospital. It may, perhaps, be taken as typical of a method employed very largely in the British War Hospitals. The theoretical foundations of this method need more consideration than they have received. It has some relation to psycho-analysis and is no doubt based on psycho-analytic findings; but its technique is different, and probably its results are different.

A similar comment may be made on the two cases of psychosis reported by Dudley Ward Fay—"The case of Jack" and "The case of Jim." The cure of dementia praecox by a dissertation on Freud's sexual theories, a little analysis and much good advice, is very interesting.

Pierce Clark contributes "A Clinical Study of some Mental Contents in Epileptic Attacks." His main contention is that "a study of the make-up and the content in the petit mal attacks gives us a more rational and enlightened method of conducting the proper therapy."

*The Journal of Abnormal Psychology*, Vol. xv, No. 1.

Among the original articles in this number are two studies of personality. In "Character *vs* Intelligence in Personality Studies" Guy G. Fernald insists that "personality studies should recognize character as an integral field of inquiry." Intelligence refers only to *capacity* or *degree* of intelligence, while character implies *quality* of intelligence. In mental tests the determination of intelligence age level is not enough. Only when investigation of character is superadded do we get an evaluation of the whole personality. Different kinds of culture and training may, therefore, be employed in trying to modify personality. But "intelligence defects are irremediable or nearly so, while character deviations are susceptible of improvement while plasticity remains."

Harold I. Gosline discusses "Personality from the Introspective View-point." He lays down the postulates of introspective psychology. Being psychology and not physiology primarily its logically necessary point of departure is consciousness and not behaviour or any form of 'ism.' All the mental functions of which the individual is capable may be analysed into sensation, association, reaction and inhibition. All these are based upon sensation, and it may be possible by analysis to determine just what sensations are at fault in any disturbances in these fields. "The analysis of the will, the attention, the thinking, the emotional and the attitude disorders should then throw light on the sensations at fault." Here would be the basis of "a rational system of psycho-analysis." One of the author's conclusions is that "the case for lesions in the white matter in the psychoses is then a very strong one."

Lydiard H. Horton contributes the last of a series of letters and papers printed in *The Journal of Abnormal Psychology* since 1913, dealing with the problem of validity in dream-interpretation. The conclusion presented is that great accuracy in dream-study can be attained through the so-called "Inventorial Technique." This writer believes there is "an immense peril to common sense" lurking in the technique of both Freud and Jung; and he would substitute for the "go-as-you-please" methods of the analysts, "a standard or criterion by which one may judge the correctness of an interpretation. This standard of interpretative rectitude is no more than the reconstitution of the train of thought." If one prepares an adequate inventory of the items of the dream, all the images in the dream may be traced to a group of particular nerve stimuli, and Horton seems to think that when dream-images are thus traced to their sensory origin the dream is 'explained' and needs no further interpretation. He is very suspicious of the "will to interpret" revealed in many dream interpretations, and he thinks that psycho-analysts can be 'entranced' in the sense that "many of them have literally fallen in love with the psycho-analytic method of thinking through the well-known Uebertragung for Freud!"

"The Psychology and Treatment of Insomnia in Fatigue and Allied States" is the title of a suggestive paper by John T. MacCurdy. He ascribes the restlessness which is part of the fatigue syndrome to a conflict between the sense of duty and the craving for shirking induced by mental and bodily fatigue. "Weariness and an instinctive tendency to avoid that which occasions it, leads him to concentrate his attention abnormally and respond to any environmental stimuli with restless activity. Unconsciously lazy, he becomes pathologically active." If circumstances prevent sleep the unconscious becomes more exacting in its demands. It sets up a yearning for the Nirvana of death, against which the conscious personality fights and reacts by still greater activity. "The patient seeks to maintain contact with his environment

by an apparently purposeless restlessness....On account of its symbolic significance, thoughts of slumber obsess him, while his whole being fights against every symptom of approaching sleep, a reaction biologically appropriate to its unconscious equivalent—death." Thus the more he tries to sleep, the more does he try to keep in touch with life. "Pathologically he clings to what his unconscious would have him lose." MacCurdy has applied these ideas in the treatment of insomnia with very good results.

T. W. M.





LA TENSION PSYCHOLOGIQUE, SES DEGRÉS,  
SES OSCILLATIONS<sup>1</sup>

PAR PIERRE JANET.

LES OSCILLATIONS DU NIVEAU MENTAL<sup>2</sup>.

LES notions relatives à la hiérarchie des actions nous ont déjà permis de classer divers individus suivant qu'ils parviennent à tel ou tel niveau psychologique au-dessus duquel ils ne peuvent pas s'élever. En décrivant les actes réflexes, perceptifs et sociaux, les actes intellectuels élémentaires, les volontés et les croyances immédiates du niveau asséritif, les volontés et les croyances réfléchies, les actes ergétiques et rationnels, les conduites expérimentales et les conduites progressives, nous avons reconnu chemin faisant l'idiot, l'imbécile, le débile mental, l'égoïste passionné, le systématique, l'esprit scientifique, le génie. Mais peu d'hommes restent ainsi fixés à un certain niveau et la notion de la hiérarchie des conduites doit nous permettre aussi de comprendre les changements que présente l'activité quand elle monte ou descend à chaque instant sous une foule d'influences et les phénomènes psychologiques si nombreux qui sont en rapport avec ces changements. Pour vous indiquer l'intérêt de ces recherches je voudrais vous rappeler comment nous pouvons interpréter à ce point de vue les phénomènes si importants de l'agitation et de la dépression qui sont unis ensemble, les divers degrés de la dépression, le rôle des circonstances qui produisent ces dépressions.

## I.

Tous les observateurs connaissent ces malades accablés par des sentiments de tristesse, d'ennui, de gêne, d'automatisme, de doute, d'irréel, d'indifférence: ils comparent leur conduite actuelle avec leur conduite passée dont ils ont gardé le souvenir, ils expriment perpétuellement le regret du passé, l'humiliation et la honte du présent et ils tirent de ces idées la matière d'un grand nombre d'obsessions et de délires. De tels malades expliquent eux-mêmes leur état en disant qu'ils sont diminués, qu'ils sont au-dessous d'eux-mêmes. En examinant leur conduite le médecin est embarrassé, il constate au premier abord que ces

<sup>1</sup> Three lectures delivered before the University of London.

<sup>2</sup> Third lecture delivered May 12, 1920.

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malades ont des sensations, des mouvements, des associations d'idées, des souvenirs en apparence corrects, il ne voit pas ce qui leur manque, il est disposé à croire qu'ils se trompent et à les traiter de malades imaginaires. Chez un certain nombre de ces malades on doit remarquer d'abord que les fonctions psychologiques sont diminuées: les actes n'ont ni la force, ni la vitesse, ni surtout la durée normale. Au début toutes les actions semblent pouvoir être exécutées correctement, mais après peu de temps ou après un petit nombre de répétitions ces mêmes actions deviennent difficiles, pénibles, elles sont accompagnées d'agitations et ne tardent pas à devenir impossibles. Il s'agit là d'une diminution de la force psychologique dont nous avons relevé la grande importance. Nous n'insisterons pas maintenant sur ces asthénies simples, elles se présentent rarement à l'état pur, le plus souvent les malades présentent en même temps des troubles d'une autre nature. Pour apprécier les asthénies il est nécessaire de connaître les autres troubles plus importants, les agitations et les dépressions proprement dites qui expliquent et qui justifient les sentiments présentés par les malades.

Dans un grand nombre de cas les actes au lieu d'être diminués paraissent au contraire exagérés: le malade renne beaucoup, il accomplit des actes de défense, de fuite, d'attaque, il parle énormément, il paraît évoquer beaucoup de souvenirs et combiner toutes sortes de récits dans des rêveries interminables. Mais examinez la valeur et le niveau de tous ces actes, ce sont de simples gestes, des tics, des commencements d'actes inachevés, des secousses des membres ou des secousses de la poitrine, des rires, des sanglots, des efforts respiratoires, en un mot des réactions simplement réflexes ou perceptives en rapport avec des stimulations immédiates sans inhibition, sans choix, sans adaptation, sans réflexion. Les pensées qui remplissent ces ruminations sont enfantines et bêtes comme les actes sont grossiers et maladroits, il y a un retour manifeste à l'enfance et à la barbarie et la conduite de l'individu agité est bien au-dessous de celle qu'il devrait normalement avoir. Il est facile de traduire ces faits dans le langage que nous avons adopté: l'agitation consiste tantôt dans une activation complète de tendances inférieures, tantôt dans une activation très incomplète de tendances un peu plus élevées mais encore fort au-dessous de celles que le sujet devrait utiliser.

C'est qu'en réalité l'agitation n'existe jamais seule et qu'elle est toujours accompagnée par un autre phénomène très important qu'elle dissimule quelquefois, je veux parler de la dépression caractérisée par la diminution ou la disparition des actions appartenant aux niveaux les plus élevés de la hiérarchie. On observe toujours que chez ces malades

certaines actions ont disparu, que certains actes exécutés autrefois rapidement et aisément ne peuvent plus être accomplis. Ces individus semblent avoir perdu leur délicatesse, leur altruisme, leur critique intelligente. L'arrêt des tendances éveillées par la stimulation, la transformation des tendances en idées, la délibération, la réflexion, l'essai semblent supprimés aussi bien que l'effort moral et l'appel aux réserves pour exécuter un acte pénible. Il y a visiblement un abaissement du niveau psychologique et il est juste de dire que ces individus sont au-dessous d'eux-mêmes.

Ces deux phénomènes, l'agitation et la dépression sont presque toujours associés : il est probable que cette union dépend de quelque loi très générale relative à la dépense des forces psychologiques. Il est probable que les phénomènes supérieurs exigent sous une forme de concentration, de tension particulière, beaucoup plus de force que les phénomènes d'un ordre inférieur, quoique ceux-ci puissent paraître extérieurement plus violents et plus bruyants. "Quand une force primitivement destinée à être dépensée pour la production d'un certain phénomène supérieur reste inutilisée parce que ce phénomène est devenu impossible il se produit des dérivations, c'est-à-dire que cette force se dépense en produisant en grande quantité d'autres phénomènes inutiles et surtout bien inférieurs<sup>1</sup>."

Pour ne prendre qu'un exemple considérons un moment le trouble banal de la timidité. Le timide qui a entrepris de parler en public ne peut pas y parvenir, il ne peut pas soutenir une conversation, il ne peut même pas entrer correctement dans un salon. C'est, dit-on, qu'il est troublé par l'émotion : il a des palpitations, des spasmes respiratoires, des secousses musculaires, un afflux d'idées dans la conscience, ce sont ces phénomènes d'agitation qui le gênent et qui l'empêchent d'agir. Si ces phénomènes ne le troublaient pas, il serait fort capable de bien s'exprimer : il réussit fort bien à faire tout seul dans sa chambre en parlant à des chaises la conférence qu'il ne peut pas faire devant le public. Il y a là un malentendu : l'action accomplie quand on est seul est une tout autre action que l'action faite devant le public, la première peut n'être qu'un bavardage du niveau des actes intellectuels élémentaires, la seconde demande un acte du niveau ergétique ou rationnel. Celle-ci se complique encore par l'acte d'affirmer sa personne, de l'exposer aux jugements d'autrui : c'est une de ces conduites relatives à la valorisation de la personne qui jouent un rôle essentiel dans les conduites ergétiques. Il est facile de constater que le timide est en réalité incapable d'une action de cet ordre élevé et

<sup>1</sup> *Obsessions et psychasténie*, 1903, t. p. 559.



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que la dérivation se produit toutes les fois qu'il est amené à essayer d'en accomplir une semblable. Sans doute il y a des cas embarrassants que nous aurons l'occasion de signaler tout à l'heure quand nous parlerons de l'émotion où la dépense excessive de forces peut être jusqu'à un certain point primitive et amener à sa suite l'épuisement et la dépression mais en général l'agitation et la dépression se développent parallèlement.

L'abaissement de la tension psychologique est quelquefois si net que certains phénomènes caractéristiques apparaissent au moment où il se produit. Dans notre première réunion nous avons déjà fait allusion au phénomène de la décharge qui permet d'interpréter bien des troubles pathologiques. Quand nous faisons autrefois l'étude des crises nerveuses, des attaques hystériques ou des accès épileptiques nous avons trop considéré l'attaque en elle-même pendant son développement: il faudrait à mon avis étudier davantage l'état physiologique et psychologique du sujet avant la crise et après la crise, on noterait des changements fort importants qui nous apprendraient beaucoup sur cette dynamique psychologique dont j'essaie de vous montrer l'importance. Déjà les anciens observateurs comme Briquet avaient observé que "malgré le brisement qui suit immédiatement l'attaque spasmodique les femmes hystériques se sentent plus légères, les membres plus dispos et l'esprit moins préoccupé qu'avant l'attaque." Avant l'attaque il y avait disproportion entre la quantité et la tension des forces psychologiques et la dépense des forces pendant l'attaque a rétabli cet équilibre dont j'ai essayé de vous montrer l'importance.

Très souvent l'attaque nous permet d'observer un autre fait également bien instructif, c'est le phénomène de la détente. On peut constater des faits de ce genre au cours des traitements des malades déprimés et il constitue malheureusement un des plus grands obstacles à leur guérison. Par différents procédés nous avons déterminé une excitation, c'est-à-dire que nous avons obtenu un fonctionnement plus actif et la restauration des activités dont le sujet paraissait incapable: les amnésies, les paralysies, les doutes, les obsessions et même quelquefois les délires semblent avoir disparu, la guérison des troubles mentaux semble complète. Mais après un temps variable, après quelques jours ou quelques heures survient une attaque plus ou moins violente et au réveil les mêmes symptômes sont réapparus car la dépression est de nouveau la même. Il n'y a pas eu simplement décharge des forces surabondantes, il y a eu changement de toute l'activité psychologique et diminution de la tension. Les accès épileptiques surtout nous permettent trop souvent de constater cette déchéance: l'état mental d'un épileptique avant et après la crise pourrait

souvent être représenté par une figure schématique où la courbe de la tension psychologique nous montrerait la profondeur de la chute pendant l'accès quand le malade retombe au niveau des actes simplement réflexes et quand son agitation convulsive n'est qu'une dérivation par arrêt complet des phénomènes supérieurs, puis elle nous montrerait le relèvement d'abord assez rapide ensuite plus lent des fonctions psychologiques et enfin l'arrêt plus ou moins prolongé à un niveau inférieur à celui où se plaçait le malade avant l'accès. De telles courbes d'ailleurs pourraient être employés dans bien d'autres cas pour caractériser bien des troubles névropathiques où l'on observe également des phénomènes analogues de détente<sup>1</sup>.

Il n'est pas nécessaire qu'il y ait une crise convulsive pour que nous observions des détentes importantes, nous les constatons après des crises de pleurs, des migraines, des agitations variées. D'ailleurs la détente ne se manifeste pas toujours d'une manière aussi visible: elle peut se faire graduellement d'une manière insensible, mais toujours on constatera dans les troubles des névroses et des psychoses qu'il y a une dépression plus ou moins accompagnée d'agitation.

## II.

La connaissance de la hiérarchie des fonctions psychologiques peut nous aider à mettre un peu d'ordre dans la description des innombrables troubles de l'esprit observés et décrits isolément comme au hasard par les moralistes et par les médecins. Il faut cesser de mettre une cloison imperméable entre les erreurs et les fautes, les bizarreries du caractère décrits par les moralistes et les romanciers et les maladies de l'esprit étudiées par les médecins. Les aliénistes ne doivent pas non plus se borner à décrire isolément les aboulies du psychasténique, les états mélancoliques, les états confusionnels, etc.: ils doivent établir les relations de ces divers états les uns avec les autres. Il me semble possible de démontrer que la plupart de ces troubles de la conduite ne sont que des degrés de la même dépression plus ou moins profonde. La profondeur de l'abaissement est caractérisée par le nombre plus ou moins grand des fonctions supérieures qui sont altérées ou supprimées et par le degré qu'occupent dans la hiérarchie les fonctions conservées et exagérées. Ce sont ces degrés de profondeur dans la dépression qui donnent aux différents troubles de l'esprit leur apparence si distincte.

Nous ne pouvons faire à ce propos que quelques remarques générales:

<sup>1</sup> *Les médications psychologiques*, 1920, III, p. 124; cf. *Ibid.*, pp. 115, 122, 273-277

certaines dépressions n'atteignent que les degrés les plus élevés de la hiérarchie psychologique, les fonctions progressives ou les expérimentales ou même les tendances rationnelles. Ces dépressions légères sont le plus souvent compatibles au moins en apparence avec la santé normale et les hommes ne sont pas habitués à les considérer comme des maladies; les troubles qu'elles déterminent sont appelés des erreurs logiques ou des fautes morales. Un esprit faux, un individu qui ne tient pas compte des souvenirs dans sa conduite présente, qui "donne le coup de pouce à l'expérience," paraît simplement raisonner mal; le paresseux, celui qui manque de courage, qui ne tient pas ses engagements, c'est-à-dire qui descend au-dessous des tendances énergétiques et rationnelles, se conduit mal et fait une faute morale. Quand le trouble atteint les tendances réfléchies et détermine les aboulies, les doutes, les phobies, nous commençons à parler de névroses. Mais nous n'hésitons pas à employer les mots de psychose et d'aliénation quand il s'agit des délires pithiatiques ou des confusions mentales où apparaissent les agitations ou les insuffisances des opérations asséritives ou des intellectuelles élémentaires. Enfin nous découvrirons des maladies du système nerveux, de vraies lésions organiques quand nous constaterons des altérations des actes perceptifs ou des réflexes. Nous ne devons cependant pas oublier que toutes ces altérations sont au point de vue psychologique de la même nature et se rattachent les unes aux autres d'une manière continue.

En nous plaçant à un autre point de vue les mêmes notions nous permettront de déterminer l'importance de tel ou tel syndrome en le situant à sa place dans une série. Pour prendre un exemple, vous connaissez ces malades si intéressants rattachés autrefois par Krishaber à la névrose cérébro-cardiaque, ces malades qui se plaignent d'avoir perdu la réalité des objets ou la réalité d'eux-mêmes: "Je ne sais plus si le monde existe...je me demande si les objets qui m'entourent ne sont pas un rêve, une comédie....Il me semble que je suis morte et entourée de cadavres dans un tombeau noir....Ma personne réelle a disparu et vous ne parlez qu'à une ombre vaine de moi-même...." Ces malades ont justement attiré l'attention des philosophes et vous vous rappelez la page brillante de Taine qui voit dans l'étude de ces malades toute une restauration de la philosophie: "une observation de ce genre valant plus, disait-il, que tout un volume de métaphysique sur la substance du moi." J'ai recueilli longuement au moins 60 observations de ces malades qui sont plus nombreux qu'on ne le croit, j'ai noté avec curiosité toutes les variétés quelquefois bien bizarres du phénomène, et à bien des reprises j'ai proposé une interprétation de ce curieux symptôme. Il me semble

indispensable d'écarter les théories qui cherchent à expliquer ce trouble par des modifications des sensations élémentaires, qu'il s'agisse des sensations externes ou des sensations internes, d'écarter les théories qui rattachent le sentiment de l'irréel à des altérations des sensations viscérales ou des sensations musculaires, à quelque trouble de ce qu'on a appelé "la somato-psychose ou la myo-psychose." D'abord des troubles réels de ces sensations tels qu'on les observe dans des maladies organiques, dans le tabes en particulier, ne s'accompagnent de rien de semblable; en outre, comme je le répète depuis trente ans, les mesures les plus précises n'ont jamais permis de constater aucun trouble d'une sensibilité interne, externe, viscérale ou musculaire chez les douteurs de ce genre. Continuer à répéter que le doute de la personne dépend d'une perte de la "somatognose" c'est expliquer un symptôme réel par un mot vide et par un symptôme imaginaire, *obscurum per obscurius*. Il me semble plus intéressant et moins ambitieux de constater simplement la nature et la profondeur des troubles de la conduite qui accompagnent le sentiment de l'irréel et de situer ces troubles à leur place dans la série des dépressions. Or ce trouble n'apparaît jamais ni dans les dépressions légères ni dans les dépressions profondes: il n'existe jamais ni chez le neurasthénique léger ni chez le mélancolique. Il n'apparaît que chez le psychasthénique au niveau des troubles de la réflexion; il se développe parallèlement aux troubles de la passion, de l'égoïsme, de la conduite intéressée. Ces individus qui doutent de la réalité de leur personne "ne s'aiment plus eux-mêmes" et se plaignent de n'avoir plus de passion pour rien, "je sais bien, répètent-ils en gémissant, que si je pouvais avoir une grande passion je guérirais tout de suite." Ils ne savent plus mettre dans une conduite l'intérêt de toute leur personne, en un mot ils ne savent plus adopter une volonté ni une croyance après réflexion. Ces observations m'ont amené à penser, comme je vous l'ai dit rapidement dans notre dernière leçon, que la conduite réfléchie amène la croyance à la réalité et au présent comme l'assentiment simple sans réflexion donne naissance à la simple notion d'être, d'existence. Sans doute ce n'est pas là une explication complète mais c'est une indication utile sur la direction des recherches, sur la nature des conduites qu'il faut étudier pour comprendre le phénomène.

Considérons un autre phénomène pathologique qui a également joué un grand rôle dans les études récentes, le phénomène de la suggestion. Il s'agit d'un assentiment, c'est-à-dire d'une volonté ou d'une croyance ordinairement complète et parvenue à son dernier degré d'activation, cet assentiment d'ordinaire s'accorde mal avec la réalité et nous paraît contenir une erreur. Mais cette exécution complète et ce caractère erroné



ne suffisent pas pour caractériser la suggestion car toutes les volontés complètes, toutes les certitudes absolues même quand elles aboutissent à des erreurs ne sont évidemment pas des suggestions. Le caractère essentiel de la suggestion doit être tiré de la manière dont le sujet arrive à cet assentiment, du mécanisme psychologique de cet assentiment. Le fait essentiel c'est que l'assentiment de l'individu suggestionné est immédiat, sans réflexion: il appartient au niveau des tendances assératives que l'on peut appeler aussi en raison de ce fait des tendances pithiatiques. Il y a là un assentiment analogue à celui des peuplades primitives ou à celui des individus atteints de débilité mentale; il est déterminé uniquement par la force momentanée que prend dans l'esprit du sujet une phrase, une expression particulière. Cette force particulière vient des circonstances environnantes, quelquefois simplement du sentiment qui l'accompagne, de l'influence de la personne qui énonce la phrase avec autorité, qui la répète avec énergie ou avec douceur. La suggestion est l'assentiment immédiat à une formule verbale qui s'impose, elle rentre dans le groupe important des impulsions.

Mais pourquoi sommes-nous surpris de ce genre d'assentiment et lui trouvons-nous un caractère anormal tandis que nous ne remarquons pas le caractère analogue des assentiments chez les débiles? C'est que les sujets sur lesquels on a observé des suggestions ne sont d'ordinaire ni des sauvages ni des véritables débiles: ce sont des individus capables de réflexion et qui dans la plupart des circonstances de la vie utilisent la réflexion plus ou moins habilement. D'ailleurs ces sujets ont à propos de la proposition suggérée un début de réflexion et on peut constater chez eux un essai de délibération ou de raisonnement. Mais comme on l'observe chez des individus incapables de conduire jusqu'au bout une discussion, leur délibération ne peut pas être prolongée et surtout ne peut pas aboutir à une décision réfléchie capable de donner à l'assentiment son dernier perfectionnement. Cependant la proposition se transforme tout de même en assentiment parce que le sujet semble renoncer à la réflexion et retombe dans une forme inférieure d'assentiment, l'assentiment immédiat sans réflexion. Nous sommes surpris de ce changement de conduite et le sujet s'en étonne lui-même: il ne retrouve pas dans l'acte ainsi accompli le sentiment de personnalité et de réalité qu'il était accoutumé à constater dans sa conduite: "Ce n'est pas moi qui ai agi, répète-t-il souvent, ce sont mes mains...j'ai été transformé en machine, j'ai agi comme dans un rêve..."

Le problème de la suggestion consiste à comprendre comment un individu ordinairement capable de réflexion cesse tout à coup de pouvoir

réfléchir et tombe dans un état inférieur où l'assentiment est déterminé d'une tout autre manière<sup>1</sup>. Il y a là une dépression particulière qui dépend évidemment d'une certaine prédisposition mais qui est produite momentanément par des influences capables d'abaisser la tension psychologique et c'est la connaissance de ces influences qui donnera l'explication complète de la suggestion elle-même.

### III.

Dans d'autres expressions psychologiques ou médicales on tient compte non seulement du degré de la dépression, mais encore de la cause de la dépression et il faut nous placer à ce point de vue pour comprendre les deux notions importantes de l'épuisement et de l'émotion.

L'épuisement ne doit pas être confondu avec la fatigue: la fatigue est un ensemble d'actions, une conduite qui réduit la dépense des forces et qui a pour but d'éviter l'épuisement; c'est une réaction plus ou moins élevée suivant le cas qui peut contenir des actes intelligents, réfléchis, rationnels même et qui rétablit l'intégrité de la force et de la tension psychologique. Cette conduite devient impossible dans l'épuisement réel: les individus épuisés ne sentent pas la fatigue, c'est-à-dire qu'ils ne commencent même pas au degré du désir les actes du repos, ils ne sont plus capables de la conduite élevée qui constitue la fatigue. L'épuisement en effet est quelque chose de tout différent, ce n'est pas une conduite normale, c'est un état anormal caractérisé par la diminution des forces disponibles et dans les cas graves par l'abaissement de la tension, c'est en réalité une véritable dépression plus ou moins profonde. Mais nous employons un mot nouveau pour la désigner parce que nous nous préoccupons de sa cause. Nous laissons de côté les dépressions constitutionnelles, celles qui sont produites par des intoxications ou des infections et quand nous parlons de l'épuisement proprement dit nous ne nous occupons que des dépressions qui semblent en rapport avec l'exécution même des actes.

Une notion importante dont une psychologie trop théorique ne tient pas assez de compte c'est que les actions dépensent des forces, c'est qu'elles sont coûteuses. "Le problème de la dépense psychologique, du coût de l'actions sera plus tard un problème capital de la psychologie et de la psychiatrie: aujourd'hui il est à peine soupçonné. Il nous suffit de rappeler ici à ce propos quelques notions pratiques: il est certain que certains actes sont plus coûteux que les autres et épuisent davantage les forces, c'est là l'origine d'une foule d'accidents nerveux. Mais il est

<sup>1</sup> *Les médications psychologiques*, 1920, t. pp. 203, 249-293.

difficile de préciser et de dire quels sont ces actes et quels sont les caractères qui les distinguent d'autres actions moins dangereuses<sup>1</sup>."

Il ne s'agit pas uniquement de la force des mouvements, mais surtout de la nature psychologique de l'acte. J'ai beaucoup insisté autrefois sur une catégorie d'actes qui déterminent souvent et facilement de l'épuisement: il s'agit des actions sociales qui sont presque toujours fort coûteuses. D'autres caractères semblent aussi rendre un acte coûteux, la complexité de l'acte, la rapidité avec laquelle il doit être accompli ont joué dans bien des cas un rôle important. Il faut bien se rendre compte que ces caractères modifient les actions. "Nous constatons cette transformation quand il s'agit de la rapidité: on ne peut pas accélérer la marche sans la transformer en course, on ne peut pas accélérer l'écriture sans adopter une écriture sténographique toute différente. Un voyage précipité qui réclame l'usage des automobiles et des trains exprès n'est pas identique à une promenade à pied, il réclame d'autres préparations, d'autres combinaisons, d'autres dépenses. Il ne suffit pas de savoir parler pour se servir correctement du télégraphe et du téléphone et la simple arithmétique ne suffit pas pour faire rapidement les calculs d'une usine ou d'une grande maison de commerce."

Un acte qui répond à une situation complexe n'est pas simplement un acte composé de mouvements plus nombreux, un acte qui réclame la mise en jeu d'un plus grand nombre de muscles, c'est un acte unique, quelquefois fort simple, mais d'un degré plus élevé dans la hiérarchie et demandant une tension psychologique plus grande. Une situation complexe au lieu d'éveiller une tendance unique comme pourrait faire une perception éveille presque toujours dans l'esprit la pensée de plusieurs conduites et donne naissance à des conflits: on ne peut alors réagir que par une délibération, par un choix, par une décision. Le sentiment de la responsabilité n'est pas autre chose que la représentation vive des motifs quand ceux-ci impliquent des conséquences graves de l'action. Ces opérations de la délibération et de la décision transposent immédiatement la conduite: au lieu des conduites appétitives qui correspondent au stade du désir et de l'assentiment simple elles exigent la conduite réfléchie qui correspond au stade de la réflexion et du contrôle des désirs. Le degré de la tension psychologique est devenu immédiatement beaucoup plus élevé. Aussi n'est-il pas étonnant que bien des individus soient incapables d'exécuter de tels actes correctement et que des conflits de conscience créés par les circonstances complexes soient l'occasion de bien des épuisements.

<sup>1</sup> *Les médications psychologiques*, II, p. 81.

On pourrait faire des remarques analogues sur les exécutions difficiles des actions, sur leur nouveauté, leur durée, leur prolongation après un échec. La transformation d'une conduite même réfléchie en une conduite caractérisée par l'effort et le travail est loin d'être insignifiante, elle est un passage à un état de tension bien plus élevé, c'est pourquoi demander une action de longue durée ou une attente c'est exiger un acte élevé et coûteux.

Nous en arrivons toujours à cette conclusion c'est qu'un acte est plus coûteux, plus propre à provoquer l'épuisement quand il est plus élevé. Il semble véritablement que l'acte d'un niveau supérieur demande pour être exécuté une dépense de forces considérable et cette remarque doit être ajoutée à nos observations précédentes sur la loi de dérivation pour nous montrer que l'action supérieure concentre les forces sous une forme particulière. Sans doute la pensée réfléchie épargnera bien des mouvements dangereux ou inutiles et déterminera au total une économie considérable des forces: la science n'a-t-elle pas pour rôle principal d'économiser les forces humaines? Il s'agit là sans doute d'un bon placement, d'une excellente spéculation; mais l'économie et les bénéfices n'existeront que dans l'avenir et pour le moment le placement demande une mise de fonds considérable. Les spéculations sont toujours dangereuses et les grandes dépenses même susceptibles plus tard d'un excellent rapport peuvent facilement amener la ruine. Il ne faut donc pas se tromper sur le caractère actuellement coûteux des actes élevés dans la hiérarchie. La principale cause de l'épuisement est l'action, surtout l'action élevée réclamée par les circonstances difficiles quand elle n'est pas en proportion avec les ressources du sujet.

Une autre cause intervient dans les dépressions, c'est l'émotion: le rôle qu'elle joue dans ces phénomènes permet de comprendre sa véritable nature et de nous rendre compte que l'émotion n'est pas autre chose qu'un épuisement d'une espèce particulière. Dans une étude que je présentais il y a dix ans à la Société neurologique de Paris<sup>1</sup> j'ai cherché à montrer que l'émotion était un trouble de l'action survenant au moment où le sujet était placé dans des circonstances particulières auxquelles il était mal adapté par ses tendances antérieures et auxquelles il ne parvenait pas à réagir correctement. Le trouble consistait en agitations de toute espèce et en impuissances, c'est-à-dire que l'on observait le fonctionnement exagéré de tendances inférieures et des insuffisances de certaines conduites supérieures qui auraient été nécessaires pour déterminer une

<sup>1</sup> "Rapport sur le problème psychologique de l'émotion," *Revue neurologique*, 30 Décembre, 1909; cf. *Les médications psychologiques*, 1920, II, p. 41.



réaction complète. En un mot l'émotion consiste essentiellement en une dépression survenant plus ou moins rapidement à la suite d'une circonstance à laquelle l'individu n'a pas réussi à s'adapter.

Nous avons quelque peine à comprendre ce phénomène car d'ordinaire la dépression est déterminée par un épuisement à la suite d'une dépense excessive. Or il nous semble que dans ce cas le sujet n'a pas eu le temps de s'épuiser par l'action car l'émotion survenant dès la perception des circonstances difficiles a empêché l'action elle-même. Comment peut-on parler ici d'une action excessive puisque le sujet n'a pas agi et où peut-on voir avant l'émotion une dépense excessive de forces?

Distinguons d'abord ces épuisements tardifs qui sont si fréquents dans les émotions: le sujet ne semble pas extrêmement troublé après l'événement, il reste des jours et des mois un peu triste et inquiet mais assez normal en apparence et après cette période que Charcot appelait autrefois la période de rumination il tombe dans une dépression grave qui manifeste un épuisement considérable. C'est que pendant cette période d'incubation il a continué sans pouvoir s'arrêter des efforts d'adaptation à une situation mal liquidée et qu'il s'est épuisé dans un travail interminable et inutile<sup>1</sup>.

Mais il y a aussi des épuisements rapides succédant presque immédiatement à la perception de la situation émotionnante. C'est que dans certains cas il y a dès ce moment de grandes dépenses de force. Précisément parce que la stimulation de la circonstance n'éveille pas une tendance bien organisée capable de réagir d'une manière adéquate qui liquide la situation, il y a éveil de nombreuses tendances élémentaires fortement chargées. Dans ces circonstances s'éveillent en effet l'instinct de la protection vitale, l'instinct de la fuite ou du combat, les tendances sexuelles, les tendances à défendre sa famille, sa fortune, ou simplement ces tendances puissantes chez l'homme en société à défendre sa propre réputation, sa valeur sociale en danger, tendances qui jouent un si grand rôle dans la crise d'intimidation. Il y a même des tendances moins précises, des tendances primitives au mouvement incoordonné qui ont simplement pour rôle de mobiliser une grande quantité de forces toutes les fois que la stimulation ne rencontre pas une tendance bien organisée et suffisante pour la réaction, c'est la tendance à chercher une issue à tout prix. Toutes ces tendances élémentaires ont un caractère commun: c'est d'être fortement chargées et de mobiliser de grandes forces.

Ces forces devraient être arrêtées dans leur mobilisation excessive,

<sup>1</sup> *Les médications psychologiques*, 1920, II, pp. 268-276.

utilisées, canalisées et même remises en réserve par l'éveil simultané de tendances supérieures. Un des caractères des tendances supérieures sur lequel nous revenons sans cesse c'est d'utiliser sous une forme particulière de grandes forces, de les transformer, de les mettre en réserve sous forme de croyances et de résolutions contenant de nouveau une forte charge latente. Elles peuvent donc arrêter, drainer les forces mobilisées et réduire leur dépense.

Il peut y avoir disproportion entre les forces mobilisées des tendances inférieures et celles des tendances supérieures éveillées en même temps. Cela peut arriver quand le danger réel ou imaginaire est vraiment considérable. Cela arrive aussi quand le sujet présente à la suite d'habitudes antérieurement acquises une disposition à grossir le danger, à se défier de lui-même, à considérer toujours ses propres réactions comme insuffisantes, à se préparer toujours à un effort énorme. Un commerçant avisé qu'il aurait le lendemain une traite à payer vend des valeurs et mobilise une somme de 20,000 francs, le lendemain la traite à payer était de 10 francs. Des dispositions de ce genre sont des facteurs importants de l'émotivité. Mais une seconde condition est encore plus importante, c'est une faiblesse des tendances supérieures déjà réduites par un abaissement préalable de la tension psychologique. C'est la dépression préexistante qui prépare l'émotivité et qui bien entendu est augmentée encore par l'émotion nouvelle de telle manière que les troubles nerveux et mentaux de la dépression se précipitent en boule de neige. Dans des cas de ce genre l'équilibre ne peut pas s'établir et il y a dès le début de l'émotion une dépense excessive de forces qui s'écoulent comme par une fuite.

Ces forces trop considérables viennent inonder les centres inférieurs et même les centres du système sympathique et déterminent ces dérivations, ces agitations viscérales qui ont joué un rôle considérable dans certaines "théories viscérales de l'émotion" mais qui doivent être considérées aujourd'hui comme secondaires. Ces agitations ne doivent pas faire oublier l'épuisement qui les accompagne et qui est augmenté par elles. Nous ne pouvons insister maintenant sur les mécanismes variés de cette dépense excessive dans l'émotion ni sur toutes les observations que l'on pourrait rappeler à ce propos. Nous ne devons retenir qu'une seule conclusion utile, c'est qu'au point de vue médical l'émotion se présente comme une forme particulière des dépressions par épuisement.

Pour comprendre la vie de l'esprit il faut reconnaître que la dépression

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et l'abaissement de la tension ne constituent pas les seuls changements que présente la conduite des hommes. Il faut faire aussi une place importante au phénomène inverse de l'excitation. Celle-ci consiste essentiellement en une élévation rapide de la tension psychologique au-dessus du niveau où elle était restée pendant un certain temps.

L'excitation ainsi entendue comporte des phénomènes essentiels inverses de ceux qui ont été observés dans la dépression, c'est-à-dire des phénomènes d'adaptation et de calme. Les tendances plus élevées qui précédemment ne pouvaient s'activer parviennent facilement à l'acte complet et même se précisent et se développent. C'est à ce moment que se fondent les souvenirs nouveaux et les habitudes nouvelles qui deviennent le point de départ de nouvelles tendances. En même temps les dérivations précédentes disparaissent et les actions même compliquées et rapides sont faites avec calme sans être accompagnées d'autres conduites exagérées et inutiles.

Nous avons insisté sur la psychologie de la dépression et nous ne pouvons étudier en détail les sentiments caractéristiques de plaisir, de joie, d'intérêt, de confiance, d'indépendance qui accompagnent l'excitation. Il nous suffit de rappeler que ce phénomène de l'excitation est aussi réel et important que le premier et qu'il détermine un grand nombre de symptômes que l'on observe au cours des névroses.

Les conditions qui semblent déterminer l'excitation sont moins connues et moins bien analysées que celles de la dépression. Nous savons que certains états physiologiques, que l'ingestion de certains poisons comme l'alcool, l'opium jouent un grand rôle, mais nous devons constater également que la grande cause de l'excitation se trouve dans les actions humaines comme la grande cause de la dépression. Les alimentations, les marches, les batailles, les actes sexuels, les dangers, les aventures de toute espèce ont été dans une foule de cas le point de départ d'excitations remarquables. C'est d'ailleurs ce qui est mis en évidence par certaines impulsions que l'on observe fréquemment chez les névropathes. Il est impossible de comprendre l'alcoolisme, la morphinomanie, la dromomanie, l'érotomanie si l'on continue à répéter que le malade délire complètement quand il réclame son poison ou son amour. Les actes des impulsifs ne deviennent absurdes que par la manière dont ils sont exécutés, mais ils ont un point de départ absolument juste, c'est que ces actions en déterminant de l'excitation peuvent dans certains cas modifier d'une manière favorable toutes les activités<sup>1</sup>.

<sup>1</sup> *Les médications psychologiques*, III, p. 195.

Ainsi toute action peut avoir deux effets différents: elle est d'un côté coûteuse et épuisante et de l'autre elle enrichit et elle excite. Même au cours de la vie normale nous avons appris à utiliser volontairement ces changements de force et de tension déterminés par l'action. Quand nous nous reposons, quand nous nous détendons au milieu d'amis, quand nous nous endormons nous baissons la tension; au contraire, quand nous commençons un acte, quand nous sommes en public, quand nous nous préparons à la lutte ou simplement quand nous nous réveillons nous nous tendons davantage. Bien des thérapeutiques dont les anciennes métallothérapies, les aesthésiogénies, les traitements par le travail ou par l'enthousiasme sont les types sont fondées sur l'utilisation de ces phénomènes.

Si nous nous rendons compte de l'importance de ces deux phénomènes opposés de la dépression et de l'excitation nous pouvons comprendre beaucoup mieux la vie de l'esprit, les oscillations de la conduite. La conduite des hommes semble bien compliquée et difficile à prévoir et cela paraît être en opposition avec la science psychologique des tendances. Si nous connaissons les tendances qui existent dans un individu et les circonstances qui agissent sur lui nous devons pouvoir prédire exactement ses réactions et cependant la conduite paraît imprévisible. Sans parler ici du rôle joué par les inventions et les progrès la grande difficulté de la prévision dépend de ce fait trop méconnu c'est que l'homme change sans cesse, c'est qu'à deux moments différents il ne présente pas le même mécanisme ni les mêmes tendances. Tantôt il n'a que des tendances inférieures qui fonctionnent suivant leurs lois, tantôt il est capable d'actions d'un niveau plus élevé qui ont d'autres lois. Ce changement peut se produire rapidement et à tout instant: il y a des oscillations rapides, de véritables crises de psycholepsie; il y a aussi des changements lents dans lesquels l'esprit descend ou monte graduellement. Certaines de ces oscillations sont courtes et l'esprit ne reste qu'un moment en haut ou en bas, d'autres sont lentes et donnent l'illusion de la stabilité. Voilà quelque chose qui complique singulièrement les prédictions de notre courte science et qui nous explique la complexité de la vie.

Beaucoup de faits importants de la vie normale et de la vie pathologique restaient confinés dans les romans et dans les écrits littéraires; la considération des degrés de la tension psychologique et des oscillations de l'esprit permettra peut-être de leur donner une place dans une psychologie plus vivante. C'est pourquoi j'ai essayé dans un tableau évidemment trop raccourci de vous donner le sentiment de ce que pourrait être une psychologie de ce genre à la fois objective et dynamique. Dans un pays



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où les études sur l'évolution se sont si brillamment développées, où l'on essaye aujourd'hui d'appliquer les idées profondes de Hughlings Jackson sur l'évolution et la dissolution du système nerveux à l'interprétation de bien des faits pathologiques, j'espère que ces réflexions générales seront accueillies avec indulgence et je vous remercie encore de l'occasion qui m'a été donnée de les exprimer devant vous.

## ON THE BIOLOGICAL BASIS OF SEXUAL REPRESSION AND ITS SOCIOLOGICAL SIGNIFICANCE<sup>1</sup>

BY J. C. FLÜGEL.

- I. *Introduction. The antagonism between Individuation and Genesis.*
- II. *The ultimate biological nature of the antagonism between Individuation and Genesis.*
- III. *The nature of the biological forces favouring Individuation and Genesis respectively.*
- IV. *The psychological correlates and consequences of the biological tendencies to Individuation and Genesis.*
- V. *The nature of the psychological difficulties involved in the realisation of the pressure of population upon the means of subsistence. Sociological consequences of these difficulties.*
- VI. *The probable sociological and psychological consequences of a more general realisation of the nature and significance of the antagonism between Individuation and Genesis.*
- VII. *Summary.*

### I.

THE discovery of the widespread occurrence and the deep significance of sexual repression is, by universal admission, one of the most striking and important results of psycho-analytic research. The course and nature of the intra-psychical conflict, as a result of which this repression comes about, has been studied in detail as it actually occurs at different mental levels, with the result that much light has been thrown on the structure and function of the human mind and on the manner of its evolution. Not only has Psycho-Analysis helped us to a realisation and understanding of this conflict itself, but it has also enabled us to obtain a clearer view of the forces engaged in the struggle—or at least of those engaged on one side. In his epoch-making studies in sexual development<sup>2</sup> Freud has given us a cogent and penetrating analysis of the

<sup>1</sup> Being an elaboration of material contained in papers read before The Society for the Study of Orthopsychics, November 6th, 1919, the Sixth International Psycho-analytical Congress, September 8th, 1920 and the British Psychological Society (Medical Section), October 20th, 1920.

<sup>2</sup> Particularly of course the *Three Contributions to the Theory of Sex*.

sources of the sexual instinct and of the manner in which this instinct comes to assume the shape in which it manifests itself in the adult human being; so that, although much remains for future research by way of corroboration, amplification and elaboration, a fairly sound foundation upon which to build up a detailed psychology of the human sexual impulses appears to have been laid.

Much less satisfactory however is our knowledge concerning the forces at work upon the other side. Although we are able to follow the changes and developments which the repressed sexual forces undergo in the process of repression, we are—in some ways paradoxically enough—still in comparative uncertainty as regards the exact nature of the forces which produce the repression and of the circumstances under which they act. In the earlier psycho-analytic work repression is frequently attributed to the influence of rather vague and indefinite factors connected with the ‘conscious ideas of the individual,’ the ‘moral forces of the personality,’ the ‘personality as a whole’ or with the desire of the individual to avoid the suffering of pain. In his later writings Freud has spoken more definitely of the ego-trends as constituting a source of instinctive energy of great power and importance which frequently acts in opposition to the sexual trends (which latter he includes under the term Libido), and in so acting is responsible for the majority of those intra-psychical conflicts, as a result of which sexual repression occurs. This psychic dichotomy (into Ego-trends and Libido) is frankly adopted by Freud in the first place for pragmatic reasons and, in so far as it is based on evidence of fact, it rests on a biological rather than a psychological foundation. At the same time psycho-analytic investigation, by its further progress, has to some extent revealed the cause of the relative backwardness of our knowledge concerning the intimate nature of the repressing forces (supposing these to be in fact connected with the Self)—this backwardness being largely dependent on the fact that the abnormal mental conditions in which aberrations of the ego-trends play the leading part have as yet been subject to comparatively little psycho-analytic study; so that the illumination that comes from the contemplation of faulty development and function as manifested in disease has not yet been thrown upon the Ego-trends to anything like the same extent as upon the Libido (disorders of which are chiefly responsible for the milder mental troubles which have hitherto most frequently been made the object of psycho-analytic investigation). An extension of our knowledge as regards the psychological nature of the forces responsible for sexual repression is therefore to be expected in the future

as the result of a more widespread and consistent application of the psycho-analytic method to the severer forms of neurosis and to psychosis. Meanwhile it would be very desirable to obtain a deeper insight into the nature of sexual repression from the biological point of view, both because this point of view must in any case constitute the ultimate foundation and logical starting point of our psychological knowledge and because it should afford a desirable preparation for dealing with the increase of psychological knowledge which we may hope soon to possess.

The biological factor to which the present paper is devoted is a very general one—differing in this respect rather markedly from most of those to which attention has been drawn by (the very few) previous investigators in this field<sup>1</sup>.

This factor is not one to which attention is now being drawn for the first time; on the contrary it has, in different connections and from different aspects, received extensive treatment at the hands of more than one authority: it is however one which has (for reasons into which we shall later on attempt to enter), in the opinion of the present writer, received far less general consideration than it deserves. It is a factor the biological and sociological importance of which is as great as, or even greater than, its importance for psychology. Its application to biology and sociology has however already been made fairly clear by the work of previous investigators (though its significance in these fields is still inadequately recognised): so that our present task may be confined (apart from a brief statement of the already developed biological and sociological aspects) to a consideration of its psychological application—an application which has indeed as yet scarcely been attempted—and to pointing out certain conclusions, chiefly in the field of social psychology, which may be drawn from this application.

*The factor in question consists in the existence of a necessary biological antagonism between the full development of the individual and the exercise*

<sup>1</sup> The only serious attempt at a study of the biology of sex repression from the psycho-analytic point of view is that of Bleuler ("Der Sexualwiderstand," *Jahrbuch für Psychoanalytische und Psychopathologische Forschungen*, 1913, v. 412), to whose short but extremely valuable work in this direction the reader is here referred. The factor studied in the present paper is partly identical with Bleuler's eighth factor; though—as will become apparent—the present writer attributes a deeper and more far-reaching significance to this factor than does Bleuler. Apart from psycho-analytic writers, attention has chiefly been confined to the phenomenon of *modesty*—which is of course only one aspect of the general inhibition of sex, but which nevertheless constitutes one of the most important conscious manifestations of this inhibition. The best summary from this point of view is probably to be found in Havelock Ellis's monumental *Studies in the Psychology of Sex*, 3rd ed. 1920, i. 5 ff.



of his procreative powers—between Individuation and Genesis, to use the convenient terms employed by Herbert Spencer—an antagonism of such a kind that (other things equal) the energy devoted to the life activities of the individual varies inversely with the energy devoted to the production of new individuals. The relative amount of energy devoted to the two ends is determined (within the limits imposed by individual modifiability and racial variability) by the action of Natural Selection, there being some influences which favour the devotion of energy principally to purposes of Individuation, while other influences favour the devotion of energy principally to purposes of propagation; so that there is brought about (within the individual and within the race) a struggle between the two lines of development corresponding to the two conflicting influences of the environment, this struggle manifesting itself within the mind as a conflict between the sexual tendencies on the one hand and the self-preserving and self-regarding tendencies on the other; a conflict as the result of which there takes place the general sexual inhibition with which we are here concerned.

It will be observed that we are here dealing with a biological factor which has been clearly enunciated by Herbert Spencer in his *Principles of Biology*<sup>1</sup>; a factor however which can perhaps scarcely be appreciated in its full significance except when considered in the light of the principles established by Malthus and by Darwin; since the true meaning of the antagonism between Individuation and Genesis only becomes manifest when we bear in mind the tremendous but unostentatious influence of the struggle for existence, as revealed by Malthus in its operation on the human race and by Darwin in its application to all forms of life.

It will be noted too that the antagonism here expressed in biological terms roughly coincides, in its application to Psychology, with the mental conflict between the Libido and the Ego-trends as understood by Freud. This being so, we may perhaps be justified in hoping that a more detailed consideration of the psychological aspects of the antagonism in question may throw some useful light upon the facts of sexual repression, as discovered by Psycho-Analysis.

## II.

In his treatment of the relations between Individuation and Genesis, Spencer proceeds first of all to show *a priori* that there must exist an inverse relationship between these two methods of race preservation, and then goes on to demonstrate *a posteriori* that this necessary relationship does in fact exist. We cannot enter here into the mass of detail

<sup>1</sup> II. 391 ff.

involved in the *a posteriori* argument; a brief review of the main outlines of the *a priori* argument may however be attempted.

Two lines of *a priori* argument are employed. In the first the inverse relationship is shown to hold good of any given species, regarded as a class of beings endeavouring to maintain its existence against the hostile forces of the environment; in the second it is shown to hold good also of the individual from the point of view of his internal economy. As regards the first Spencer argues<sup>1</sup>: "We have already seen that the forces preservative of race are two—ability in each member of the race to preserve itself, and ability to produce other members—power to maintain individual life and power to generate the species. These must vary inversely. When, from lowness of organization, the ability to contend with external dangers is small, there must be great fertility to compensate for the consequent mortality; otherwise the race must die out. When, on the contrary, high endowments give much capacity of self-preservation, a correspondingly low degree of fertility is requisite. Given the dangers to be met as a constant quantity; then, as the ability of any species to meet them must be a constant quantity too, and as this is made up of the two factors—power to maintain individual life and power to multiply—these cannot do other than vary inversely: one must decrease as the other increases."

He then proceeds to show that every species must conform to this law on pain of ceasing to exist; or else—if the departure from the law is only slight—that there comes into play an automatic process of regulation, whereby the inverse relation is soon re-established. "Suppose, first, a species, whose individuals having but small self-preservative powers are rapidly destroyed, to be at the same time without reproductive powers proportionately great. The defect of fertility, if extreme, will result in the death of one generation before another has grown up. If less extreme, it will entail a scarcity such that in the next generation sexual congress will be too infrequent to maintain even the small number that remains; and the race will dwindle with increasing rapidity. If still less extreme, the consequent degree of rareness, while not so great as to prevent an adequate degree of procreative unions, will be so great as to render special food very abundant and special enemies very few—will thus diminish the destructive forces so much that the self-preservative forces will become *relatively* great; so great, relatively, that when combined with the small ability to propagate the species, they will suffice to balance the small destructive forces.

<sup>1</sup> *Principles of Biology*, II. 401.

Suppose, next, a species whose individuals have great powers of self-preservation, while they have powers of multiplication much beyond what is needful. The excess of fertility, if extreme will cause sudden extinction of the species by starvation. If less extreme, it must produce a permanent increase in the number of the species; and this, followed by intenser competition for food and augmented number of enemies, will involve such an increase of the dangers to individual life, that the great self-preserving powers of the individuals will not be more than sufficient to cope with them. That is to say, if the fertility is relatively too great, then the ability to maintain individual life inevitably becomes smaller, *relatively* to the requirements; and the inverse proportion is thus established."

Two points of special interest for our present and subsequent considerations should be noted in connection with this argument. In the first place, we should observe that the maintenance of the inverse relationship between Individuation and Genesis is due to the action of the destructive forces of the environment: these destructive forces consisting principally of enemies, who may directly attack and kill the individual members of the species, and of the shortage of food (or other necessities), which may indirectly reduce the numbers of the species by allowing a certain proportion of the individual members to perish through want of adequate sustenance; this latter factor being (as Malthus has so convincingly shown) the one predominantly effective in reducing numbers in the human race.

Secondly, we may draw from Spencer's principle the corollary that a more rapid multiplication in any species must (other things remaining the same and within certain limits) bring in its train greater difficulties in the way of preservation of the individual life; while if the species takes to multiplying less rapidly, this will (with similar reservations) cause a corresponding reduction of the forces destructive of the individual, who will therefore enjoy a safer and a longer life. This corollary is of obvious importance in its application to the human race, where the rate of multiplication is to some extent directly under volitional guidance and where in consequence it would appear that in birth control we possess a potent weapon for rendering the individual human being longer-lived, more amply provided with the necessities of life and less exposed to the rigours of the struggle for existence; in other words for attaining those ends which the majority of social and political reformers have principally in view. That the corollary is true in fact has been shown by the evidence of vital statistics, which reveal a high positive

correlation between birth rates and death rates throughout the world, indicating that a high degree of exercise of the reproductive powers tends to be associated with a relatively high degree of danger to the individual life<sup>1</sup>.

Spencer's second *a priori* argument, as already indicated, treats the matter from the point of view of the internal economy of the individual, and although of somewhat lesser interest from the biological and sociological points of view, is perhaps of even greater importance as regards the psychological aspects of the antagonism between Individuation and Genesis. The matter and energy which go to the formation of a new individual are withdrawn from the parent or parents and are therefore not available for enrichment of the parents' life, as they otherwise might be. This is very evident in the case of lowly organisms with whom reproduction takes the form of a simple budding off from the body of the parent; where it is clear that the more frequent the budding off and the larger the portions budded off, the greater is the amount of matter and energy subtracted from the parent organism. In higher organisms, with their various methods of sexual reproduction, the same relation holds, though considerably obscured by the complexities in which the antagonism between Individuation and Genesis now manifests itself.

<sup>1</sup> Our knowledge of the existence and significance of this correlation we owe largely to Dr C. V. Drysdale, whose important sociological work, published unfortunately in somewhat inaccessible form, is far less known than it deserves to be. Cf. *The Small Family System*, Fifield, 1913; *Wages and the Cost of Living*, 1913; *Diagrams of International Vital Statistics*, and the series of papers on "The Malthusian Doctrine and its Modern Aspects" in *The Malthusian*, 1916 and 1917 (the three last being published by the Malthusian League). By his statistical work Dr Drysdale has shown that in practically all countries rises and falls in the birth rate are accompanied by corresponding rises and falls in the death rate, so that a decrease in the number of births (such as has taken place in the last forty years or so in most civilised countries) has been accompanied by a more or less proportionate decrease in the death rate; that countries with stationary birth-rates have more or less stationary death rates, and that the few countries which have shown a rise of birth rate have also shown a rise of death rate. These correspondences afford strong confirmation of the Malthusian position that each country can only support a certain limited (though under modern—pre-war—conditions, usually increasing) population, and that when by an unduly high birth rate the population endeavours, as it were, to increase beyond the limits imposed by biological and economic causes, the result is an increase in the death rate that cancels the effect of the high birth rate, so that the total population (or increase of population) remains approximately the same. The apparent exceptions to the correspondence between birth and death rates really prove the rule—for these exceptions (there are only two) are Australia and New Zealand, the two countries with the lowest recorded death rates and (almost certainly) the smallest amount of poverty, showing that in these cases there does not exist the pressure of population upon the means of subsistence which appears to prevail to a greater or less degree in all other countries for which adequate vital statistics are obtainable.



The production of offspring always involves some sacrifice on the part of the parent, hence there always tends to be a negative correlation between the degree of parental development and the number of offspring produced. The sacrifice required of the parent may however affect one or more of several aspects of his existence, so that the inverse relation between parental development and production of offspring may not hold strictly of any one of these aspects, but only of the total quantity of energy constituting the life of the parent. The chief of these aspects as regards which the inverse relationship in question may manifest itself are: size, complexity of structure, degree and complexity of the activities of mind and body (*i.e.* amount of energy expended in vital functions); while, in addition to the expenditure involved in the actual production of offspring, there is also to be taken into account the nutritive material directly supplied to them from the parent's body, together with the energy expended in providing them with food from other sources and in protecting them from danger<sup>1</sup>.

Furthermore, the relationship is complicated by the fact that the absolute amounts of energy available for purposes both of Individuation and of Genesis depend upon the quantity and quality of nutriment obtainable by the parent, so that better fed individuals may, without any sacrifice of individual development, produce more offspring than the less well-fed individuals of the same species. As a further complication there should, strictly speaking, be considered, not only the number of offspring produced but also the size, quality etc. of this offspring: but as the size and quality of offspring are usually more or less proportional to the size and quality of the parents, this additional consideration can often be omitted in approximate comparisons—especially of course in comparisons between different species.

When all these complicating factors are taken into account, it appears that there must exist a very close inverse relationship between parental development and number of offspring, -or in other words between the devotion of the available vital energy to purposes of individual life on the one hand or to purposes of propagation on the other. That this inverse relationship required by theory does exist in fact is shown by

<sup>1</sup> It should be noted however that these two last-named factors are in one respect less opposed to Individuation than are the others; since, although the actions involved in the provision of food for the young or the protection of the young from danger are of no personal benefit to the parent, yet the muscular or mental capacities involved in these actions may be used for other purposes in which the individual *does* personally benefit. Thus a powerful muscular development in the parent may be of use both for the protection of offspring and for individual ends.

Spencer in his minute and painstaking review of the reproductive habits of animals at all levels of development—a review to which the final chapters of his *Principles of Biology* are devoted: so that in conclusion he is able to formulate the law “that every higher degree of organic evolution [as exhibited in the development of the individual] has for its concomitant a lower degree of that peculiar organic dissolution which is seen in the production of new organisms<sup>1</sup>.”

That this law of the antagonism between Individuation and Genesis applies to human beings as well as to all other animals is shown by Spencer in the course of his review, and indeed this is abundantly clear without any special demonstration, both as a result of our previous considerations as regards the racial aspects of the antagonism and from the commonplace observations of everyday life; which show that parenthood almost always involves some (often very considerable) sacrifice of individual interests.

Vital statistics again afford us scientific proof that common observation is in this respect correct, for they reveal the fact that there is a very general inverse correlation between birth rate and social culture. Not only are the birth rates of relatively uncivilised nations as a rule considerably higher than those of their more civilised neighbours, but within a given community the birth rate of the poorer and less cultured classes is almost invariably higher than the birth rate among those who possess greater wealth and culture. This inverse relationship, which eugenists deplore, is indeed only a particular manifestation of the general law of the antagonism between Individuation and Genesis<sup>2</sup>.

But in endeavouring to abolish this relationship, our modern social reformers of the biological school are not necessarily doomed to failure (though their task is perhaps more difficult than they imagine); for it would seem that mankind has indeed the power to establish such conditions that the operation of the law in human society will be far less

<sup>1</sup> *Op. cit.* II. 472.

<sup>2</sup> An important qualification should be added here. In virtue of the fact that the reproductive organs constitute a very essential part of the organism as a whole, healthy function of these organs is necessary for the health of the organism and any attempt to abolish or unduly to curtail their function is not to the advantage but to the disadvantage of the organism. Thus it is probable that the majority of women are—in spite of the sacrifices that maternity entails—capable of becoming on the whole and in the long run more efficient human beings as wives and mothers than as spinsters (cf. the increased health and beauty of so many women after—or even during—pregnancy); the same applying of course *mutatis mutandis* to the reproductive life of men. In the psychic sphere, the importance of this principle is now well recognised by psycho-analysts, who attribute much neurosis and consequent mental inefficiency to unsuccessful attempts at excessive sublimation.

stringent than has hitherto been the case, and that by the exercise of this power certain biological and economic factors through which the law now manifests itself can be partially or wholly withdrawn from its sphere of influence. Some of the problems connected with this possibility will be discussed in the concluding section of this paper.

### III.

Hitherto we have dealt only with the nature of the relationship between Individuation and Genesis and have shown that this relationship must be inverse. We have said nothing as to the manner in which the ratio between Individuation and Genesis (which varies so enormously in different species) is established in any given case. And yet this problem is obviously of very great importance to us here; for Psycho-Analysis is interested above all in the dynamic and functional aspects of the mind and is concerned not only with the distribution of mental energy as it exists at any given moment, but also with the changes in this distribution that occur in the course of mental life—in the individual and in the race: or to put the matter in terms of our present problem, we are interested not only in the existing aspects of the struggle between the sexual tendencies and the self-regarding tendencies but also in the modifications which this struggle has undergone and is likely still to undergo in the course of evolution.

To the modern student of biology there can be little doubt that Natural Selection is the ultimate force at work in deciding what proportions of matter and energy shall be devoted to Individuation and to Genesis respectively in any given species, and what modifications (if any) the ratio between Individuation and Genesis shall undergo in the history of that species. To quote Spencer once more, we may say that “whether the interests of the species are most subserved by a higher evolution of the individual joined with a diminished fertility, or by a lower evolution of the individual joined with an increased fertility, are questions ever being experimentally answered. If the more developed and less prolific variety has a greater number of survivors, it becomes established and predominant. If, contrariwise, the conditions of life being simple, the larger or more organized individuals gain nothing by their greater size or better organization; then the greater fertility of the less evolved ones will insure to their descendants an increasing predominance<sup>1</sup>.”

<sup>1</sup> *Op cit.* II. 473. As Spencer points out in this connection, every successful modification in the direction of increased individuation “entails a decrement of reproduction that

It is clear that in the history of animal life the conditions have very frequently been such that an increase of Individuation at the cost of Genesis has been of advantage in the struggle for existence; enabling those species or individuals who have undergone such increase to procure more or better food or to procure it with less effort, to avoid dangers more successfully, or else to protect their offspring more effectually. The main course of evolution appears indeed to lie in the direction of increased Individuation at the cost of diminished Genesis. But progress in this direction has only been achieved in the face of constant difficulties and in the course of a continual struggle between antagonistic forces within the organism itself and in its environment. Advance is therefore always slow and frequently uncertain. Such facts as the persistence at the present day after millions of years of evolution of living beings which never progress beyond the stage of unicellular existence and—at the other end of the scale of life—the disappearance from the earth of the magnificent saurians of the Jurassic epoch, serve to remind us very forcibly that conditions often remain favourable for primitive forms of life in which Individuation is at a minimum and Genesis at a maximum, and that changing circumstances may produce an environment that is unfavourable for the more ambitious attempts at Individuation characteristic of a previous age.

There is every reason to believe that as regards the human race evolution is proceeding on the same lines as those which it hitherto has followed, *i.e.* that there is a predominant tendency towards increased Individuation. In this respect however, as in so many others, evolution is here taking place at a faster rate than usually occurs in the lower grades of life. Progress has indeed been so rapid that it has to some extent obscured the antagonism between Individuation and Genesis when comparisons are made over a relatively long period of development; for modern civilised man not only on the whole enjoys a richer

is not accurately proportionate but somewhat less than proportionate. The gain in the one direction is not wholly cancelled by a loss in the other direction, but only partially cancelled: leaving a margin of profit to the species." For "if the extra outlay [in individuation] is but just made good by the extra advantage, the modified individual will not survive longer, or leave more descendants, than the unmodified individuals. Consequently it is only when the expense of greater individuation is outbalanced by a subsequent saving that it can tend to subserve the preservation of the individual; or by implication, the preservation of the race. The vital capital invested in the alteration must bring a more than equivalent return." This signifies that the ratio between Individuation and Genesis in the course of evolution (as distinct from the ratio as it exists at any given moment) is approximate only and not exact, the general law as regards evolution being that "Genesis decreases not quite so fast as Individuation increases."



individual existence than does primitive man but is not inferior to him in reproductive power; the truth being that civilisation has conferred such immense benefits upon man in the way of providing a more regular and more easily obtainable supply of the necessities of life as to render more energy available for purposes both of Individuation and of Genesis. Nevertheless, if we confine our considerations to a narrower period of time, it is easy to see that there exist those inverse correspondences between Individuation and Genesis to which we drew attention in the last section, and that Natural Selection (modified no doubt, in accordance with the more complex conditions of human life) is still at work in determining the ratio between the two factors.

In the long run Individuation has brilliantly justified itself. It is the increasing complexity of the individual life (and the increasing complexity of the inter-relations between one individual and another that in a human community goes hand in hand with this) and not the ability to produce large numbers of offspring that has been the principal factor in the progress of civilisation—and that civilisation is *on the whole* a success from the biological standpoint is shown by the great increase of population that it makes possible. As we have seen, this increase of Individuation can only have been achieved at the cost of a withdrawal of energy that might otherwise have been devoted to purposes of reproduction; so that, in the main, human evolution has involved a triumph of Individuation over Genesis, *i.e.* those individuals, communities and races which have concentrated on individual development rather than on multiplication have for the most part proved biologically superior to those who have relied more on their fertility than on their culture.

Though this is beyond doubt the main trend of human evolution, it is of great importance to realise that there has only been a *preponderance* of forces working in this direction and that there have not been wanting influences which have favoured Genesis rather than Individuation or which have at any rate favoured only a relatively small predominance of Individuation over Genesis. Since, in view of the treatment of the psychological aspects of the antagonism between Individuation and Genesis upon which we must shortly embark, it is of importance to have a sound appreciation of the underlying forces arrayed on either side, it may be of interest to conclude our biological considerations with an enumeration of some of the more important factors which are opposed to any rapid increase of Individuation over Genesis.

(1) At all except the highest levels of human development there is a tendency for the advantages obtained by a higher degree of Individua-

tion to be largely cancelled by a subsequent increase of Genesis. As we have seen, an increase in the amount of nourishment obtainable leads to an increase of energy available both for purposes of Individuation and of Genesis. If such increase of nourishment has been obtained as the result of an increase of Individuation, there will doubtless be present an hereditary tendency for energy to be devoted to Individuation rather than to Genesis, so that the newly available energy will also tend to some extent to flow in this direction. On the other hand Genesis is a biologically older and therefore more readily traversable channel for the draining off of energy than is Individuation, and when the struggle for existence is rendered less severe by the increased supply of nourishment<sup>1</sup>, it is easy for the new energy to regress into this channel and to take the more viable path of Genesis rather than the more difficult one of Individuation. Should such a regression actually occur, a more rapid rate of reproduction ensues, and the advantages of the increased supply of nourishment may be partially or wholly annulled owing to the increased number of individuals to be fed. The struggle for existence thereupon becomes severer once again and the whole cycle may be repeated, so that there tends to be a rhythmic alternation in the ratios between Individuation and Genesis, in the course of which Individuation can only very slowly make a permanent advance.

As political economists have shown<sup>2</sup>, this rhythmic alternation manifests itself quite clearly in the human race; every increase of prosperity (implying increased opportunity for individual enjoyment and development) leading to an increase in the number of marriages and births, so that the increased resources are spent in maintaining a larger number of individuals at much the same cultural level as before rather than in improving the conditions of the individual life. It is only at quite high levels of culture that this tendency is counteracted by a tendency of an opposite kind, *i.e.* one according to which the possession of certain individual advantages leads to the effective desire for still further advantages—advantages that can only be obtained by a still further increase of Individuation at the cost of Genesis; the tendency in question leading therefore to a reduction rather than an increase in the birth rate as a consequence of prosperity.

(2) The decreasing severity of the struggle for existence brought

<sup>1</sup> The same argument applies, of course, *mutatis mutandis*, if the advantage is not an increased supply of nourishment, but, say, a greater power of escaping from or overcoming enemies.

<sup>2</sup> *E.g.* J. S. Mill, *Principles of Political Economy*, Bk. IV, ch. III, § 4.

about by a successful advance in Individuation usually entails a less strict elimination of the unfit. The unfit are however in this case the less individuated and more prolific members of the species (since it is through an increase of Individuation that the fit have succeeded in diminishing the intensity of the struggle for existence). Hence, Individuation, by its very success, allows the more prolific stocks to increase at a more rapid rate than before and thus slows down its own progress. The advantages derived from increased Individuation in the race may thus in a short time be cancelled, so that the struggle for existence becomes severer once again and elimination therefore stricter. In this way there may be established a rhythmic alternation of greater and lesser Individuation of much the same kind as that referred to in the last paragraph—the alternation here being concerned with a more or less rigorous selection of the more individuated (and therefore—relatively or absolutely—less prolific) members of the *species*, whereas the former alternation was concerned with modifications in the ratio between Individuation and Genesis in the *individual*.

The present factor is one that operates extensively in modern civilised society, where—as eugenists are pointing out—the unfit not only profit by the generally increased supply of necessities made available by the labours of the fit, but are to a considerable extent directly supported at the cost of the fit, who have to forego some of the advantages of their fitness (sacrificing therefore some of the energy that would otherwise be available for their own further Individuation or increased Genesis) in order to support their weaker fellows.

(3) Apart from the tendency for a diminution in the intensity of the struggle for existence—as manifested in increased food or diminished danger—to cause a regression from Individuation to Genesis (1 above) and to reduce the relative advantages of Individuation (2 above), there is also a tendency for vital activities to be *generally* lowered, when circumstances no longer demand a high degree of these activities as an essential condition of the maintenance of life. All vital activities take place in response to certain stimuli, and the most efficient stimuli are those that have a direct bearing on the preservation of life. When the life of the individual is frequently in danger and when his most urgent needs can only be fulfilled with difficulty, he is (other things equal) likely to act more energetically and more effectively than when life is secure and all the urgent needs can be satisfied with relatively little effort. In extreme cases of the latter kind (which under natural conditions are of very rare occurrence) the organism tends to regress to

markedly simpler (predominantly vegetative) forms of vital activity—these being sufficient for its purposes in the easy circumstances of its life. The higher animals are prevented from attempting the extremer forms of this regression by the fact that their needs and desires are numerous and complex, and are consequently seldom all entirely gratified even in the most favourable circumstances. Even in Man however (especially in uncivilised man) relative inactivity may frequently result from easy conditions of life. Such individuals or races are then, sooner or later, superseded by others who have been trained in a harder school and with whom the struggle for existence has been more severe. But severity of this struggle is usually accompanied by—and indeed results from—a relatively high rate of reproduction, so that the latter individuals or races will be relatively prolific; in virtue of these influences therefore, there is frequently at work a tendency for the more prolific individuals or races to supersede those that are less prolific.

(4) In so far as energy is retained in spite of easier conditions of life, there is a tendency for it to be directed to aims and objects, which (though they may sometimes be of great eventual utility) provide little or no *immediate* biological advantage. This is of course especially the case as regards the human race. As soon as the struggle for existence is relaxed, men tend to pursue certain ends unconnected (or at best only indirectly connected) with life-preserving activities. Play, art and science (all in their widest sense) are perhaps the principal categories under which these ends fall, and although some of these manifestations of human energy have indirectly contributed very greatly to the preservation and increase of the race, they are inferior as regards their immediate biological value to such activities as the procuring of food and other necessities, the escaping from danger and the overcoming of enemies. Hence any individuals or communities indulging too freely in activities of the former kind are liable to be superseded by other individuals or communities with whom activities of the latter kind are more predominant. But in these latter individuals or communities the ratio of Individuation to Genesis is on the whole smaller than it is in the former individuals or communities, so that, as a result of this factor, there is again a constant tendency working in favour of Genesis rather than of Individuation.

It can easily be seen that influences of this kind are often of great importance in the human race. Within any given community the highly individuated classes with low birth rates devote large portions of their time and energy to ends, which are indeed intimately connected with



culture, but which have little direct bearing on the ability *to live*. Their interests are in fact very largely devoted to luxuries rather than to the necessities of life. They acquire a high standard of living in which such luxuries as books, pictures, music, elaborate clothing, daintily prepared food, elegant and convenient dwellings, come to be regarded almost as necessities. Unwilling to sink below this standard, they restrict the number of their offspring in such a way as to make sure that the standard will not be endangered. As a consequence, they are liable to be superseded by their less luxurious, less cultured but more prolific fellows who are content with a lower standard of living—each class in the scale of luxury and culture leaving in each generation fewer survivors than the class immediately below it. At the lower end of the class scale this tendency is largely counteracted by the higher death rate of the more prolific but less individuated classes; here Individuation has a real and immediate survival value. But as soon as Individuation is directed to luxury and culture rather than to the preservation of life, the tendency in question begins to work and constitutes one of the most potent influences in retarding the advance of Individuation.

Precisely the same considerations apply, *mutatis mutandis*, to nations and races. A prolific race which is content with the necessities of existence and does not aspire to luxuries is always liable to supersede a more cultured race that 'peoples down' to a higher standard of living. Up to a certain point the higher race may maintain its numbers owing to the fact that the higher birth rate of the lower race is compensated by the accompanying higher death rate. Even above this point the higher race may still maintain itself (or may even supersede the lower race), if its culture can be turned to ends that have survival value, *e.g.* by the superior control of natural forces resulting from the applications of science or by the advantages derived from a more complex and differentiated social structure. But that the danger to the more cultured races is a real one is shown by the repeated destruction of the complex civilisations of antiquity at the hands of peoples who were, relatively speaking, little more than barbarians.

#### IV.

Let us now turn to a consideration of the psychological consequences of the antagonism, the biological aspects of which we have been following. It would seem that on the psychological side there must be an antagonism which in the main is worked out on similar lines. Since the psychic activities of the individual correspond in a definite (though

complex and often obscure) manner to the physiological activities, it is natural to assume that the rival processes of Individuation and Genesis compete for possession of the available psychic energy in much the same way as in the case of the physical energy; that the amount of energy devoted to one of these rival processes is in inverse proportion to that devoted to the other; and that, corresponding to the increased success of Individuation over Genesis in the course of evolution, there has been a tendency for the proportion of psychic energy devoted to Individuation to be increased at the cost of the proportion devoted to Genesis.

Endeavouring now to put the concepts of Individuation and Genesis into psychological terms, there can be no doubt that Genesis has as its representative in the psychic sphere the sexual instinct, together with those impulses and instincts which centre round the care of children (if we distinguish these from sexuality proper; Psycho-Analysis has of course shown that the relation between sexuality and the parental tendencies is much closer than had formerly been supposed); while corresponding to Individuation are those tendencies through which on the one hand we adjust ourselves to our environment and on the other hand modify this environment in such a way as to make it conform as far as possible to our desires and needs—in fact those tendencies which are active in the case of *work* (using this term in its broadest sense). Now an antagonism of this kind between the sexual instinct on the one side and the work tendencies on the other corresponds exactly to the conflict that Psycho-Analysis has shown to underlie the repression and displacement of the sexual trends; for the normal outcome of this conflict is that the energy which was originally devoted to sexual purposes is sublimated, *i.e.* put into the service of the work tendencies; or, in our previous terminology, is diverted from purposes of Genesis to purposes of Individuation. There can be little doubt then that in the process of sublimation is to be found the principal psychological aspect of that antagonism between Individuation and Genesis, the general significance of which in the evolution of life we have already been at pains to show: and we are therefore justified in assuming that the underlying biological conditions are the same here as before, and that, in consequence, the tendencies that lead to sublimation have come about as the result of the same evolutionary forces that have elsewhere operated in favour of Individuation at the cost of Genesis, *i.e.* Natural Selection, working through the struggle for existence occasioned principally by the shortage of food.

Freud himself, it would appear, takes this view of the origin and

ultimate nature of sexual repression, for in his recent *Introductory Lectures on Psycho-Analysis* we read<sup>1</sup>: "The motivating force of human society is fundamentally economic; since there is not sufficient nourishment to support its members without work on their part, the number of these members must be limited and their energies diverted from sexual activity to labour. Here again we have the eternal struggle for life that has persisted from prehistoric times to the present." In the facts of sexual repression and displacement—which in the light of Psycho-Analysis may be regarded as constituting one of the most fundamental principles of dynamic psychology—we thus recognise another aspect of the same great law which through the labours of Darwin and Wallace became one of the corner stones of biology and which had previously by Malthus been made the foundation of sociology and economics. An underlying unity of this kind between the basic principles of several sciences is at once encouraging as an indication of the general accuracy of the principles concerned and impressive as a proof of the far-reaching importance of these principles.

The severity of the conflict between the sexual tendencies and the work interests is thus to a large extent explained as a result of the conflicting environmental forces which favour Individuation and Genesis respectively. The fact that in this conflict it is the work tendencies which present every appearance of being the more recently acquired and developed (the sexual tendencies seeming in comparison more deeply and firmly rooted in our nature) is of course only what we should expect after our biological survey; which showed clearly that a high degree of Individuation (with the lower degree of Genesis that this entails) is a relatively late product of evolution, Genesis being in every way the simpler method of race preservation. At the same time the severity of the conflict and the extreme degree of the resulting sexual repression also indicate in their turn that the antagonism between Individuation and Genesis has been very violent in the human race and that the increasing influence of the environment in favour of Individuation has imposed on man the necessity for a relatively rapid diversion of psychic energy from sexual interests to work—rapid, that is, as compared with the general speed of evolutionary processes. Man, like all animals subject to an intensive process of Natural Selection, is suffering from a disharmony, in that he is not completely or equally adapted to his environment. Under the influence of Natural Selection he has developed certain tendencies which are at variance with certain other tendencies which

<sup>1</sup> Lecture 20.

were adapted to an earlier condition and which (being now vestigial) are to a large extent useless and even harmful. In the present case it is evident that Natural Selection has made it ever more advantageous for man to direct his energies to work rather than to sexuality: as a consequence he feels the ever-present need to work compelling him to do things that are difficult and often disagreeable, but which are nevertheless necessary if he wishes to preserve himself. But at the same time he has not been able to eradicate or overcome the older tendency to rely on Genesis rather than on Individuation and, like his fellow creatures on the same path of evolution, he is burdened with greater capacities of reproduction and greater tendencies to reproduction than he needs or than he can easily control. His reproductive powers, like those of all other living creatures, are enormous as compared with the actual possibility of increase—a possibility that is rigorously determined by the amount of nutriment available. Although he does not exercise these powers to the full extent, he nevertheless still uses them excessively, so that his numbers tend to be always in excess of those for which adequate sustenance can be provided (thus maintaining the struggle for existence, though of course in a modified and more complex form than in the case of the lower animals): and finally, even apart from actual reproduction, his thoughts and desires tend to be directed upon sexual matters to an extent that interferes very seriously with his capacity for work.

It is on this latter aspect of the antagonism between Individuation and Genesis that Psycho-Analysis has brought to light much invaluable material, some of which it behoves us to take into consideration here. More especially has it shown that the relationship between the sexual tendencies and the work tendencies is of a complex order—more involved than might perhaps have been expected on *a priori* grounds. In some respects possibly the relationship in question is the comparatively simple one that obtains between two (structurally and functionally) distinct sources of energy tending to pull the individual in different directions, the sexual forces on the one hand being opposed by the self-preservative trends upon the other. Recent psycho-analytic research has shown however that to a very large extent the relationship is more complicated, in that the sexual and work tendencies are both derived from the same source of energy (the Libido)<sup>1</sup>. Now in so far as this is the case, the two

<sup>1</sup> It is interesting to note that as psycho-analytic insight has increased, it has become more and more difficult to indicate the nature and function of the Ego-impulses, the sexual sphere tending to be constantly enlarged at their expense (chiefly of course through the recognition of the Narcissistic components of the Libido. Cf. too in this connection, Freud's recent work "Jenseits des Lustprinzips," *Beihefte d. Int. Zeitschft. f. Psychoanalyse*, No. 11).



alternatives do not correspond simply to different paths along which this energy can be drained off once for all at the start. Rather it would seem that the sublimated work tendencies are throughout built upon a (usually unconscious) sexual foundation. Without an adequate quantity of libidinous energy the sublimations cannot be formed, and in early childhood this libidinous energy always takes a sexual path; it is only after a certain period of life that the sublimations branch off from the more primitive sexual paths, the divergence being at first slight only, though later on it becomes more and more pronounced, so that the sexual origin of the higher adult sublimations is usually no longer easily recognisable.

But it is not only in the early stages of its development that the libidinous energy employed in sublimation assumes a directly sexual form. The results of psycho-analytic research appear to indicate that in the Unconscious a certain amount of sexual gratification is throughout life derived from the function of the sublimations, which in the deep levels of the mind are interpreted in a sexual manner in a way quite foreign to conscious thought. Sublimation being thus possible only through the existence of a strong Libido which manifests itself originally (and probably throughout life, in the Unconscious) in a sexual form, the increasing sublimations involved in the growth of Individuation necessitate at the same time a strengthening and deepening of their sexual foundations; so that each increment of energy devoted to Individuation would seem to involve (in the psychic sphere at any rate) some increment of energy also for its rival, Genesis—a fact that renders the higher stages in the growth of Individuation processes of peculiar difficulty and delicacy which are very liable to aberration.

The relationship between the sex tendencies and the work tendencies is thus complicated by the fact that a powerful sexual energy is required as a foundation for sublimation; but this is not the only complexity involved in the relationship. There are at least three other factors which make it necessary for the libidinous energy to be devoted, even in adult life, to sexual purposes as well as sublimation, and which, though closely inter-related, may yet perhaps, for the sake of clearness, be considered separately.

In view of this and of the admitted difficulty in distinguishing between the self-preservative and the sexual trends in the very early periods of life, there would seem to be a tendency to approximate in this respect (chiefly of course a formal one) to the view previously adopted by Jung, who regards the Libido as constituting the sum total of available conative energy—except that this tendency does not imply (as it does with Jung) any diminution in the significance attached to sexuality.

The first of these is the actual biological necessity for reproduction—which of course persists, however high may be the degree of Individuation, and which moreover, as we have already seen (Section III above), is liable to be prevented by a number of biological influences, which work in favour of Genesis rather than of Individuation, from attaining that low level which alone is compatible with the highest forms of Individuation.

The second factor is connected with the relatively slow physiological and psychological adaptability of the organism, as a result of which (quite apart from the above-mentioned influences favouring Genesis and even in the face of powerful forces favouring an increased degree of Individuation) only a certain quantity of libidinous energy is capable of sublimation; any attempt to increase this quantity beyond certain limits resulting not in sublimation, but in those unsatisfactory forms of displacement which constitute neurosis or else in unprofitable inhibitions, prohibitions or taboos. The limits in question vary greatly according to age, race and individuality, but in every mind there would appear to be a point beyond which the drafting off of sexual energy into non-sexual channels produces harm instead of benefit. Under the pressure of modern civilisation, with its stern demands for the repression of sexual gratification and the devotion of libidinous energy to sublimation, such attempts at excessive sublimation are very frequent and manifest themselves in the large number of individuals who suffer from the various forms of nervous disease.

The third factor is to be found in the existence of certain correlations between sexual and non-sexual function and development. Just as on the physiological side it appears probable that the performance of the sexual functions (and more particularly perhaps the production of the special secretions of the sexual organs) are of benefit to the organism as a whole, quite apart from sexual life, so too, on the psychological side, it is now fairly clear that normal sexual development and exercise are necessary conditions of healthy mental life in general. Absence of sexual interests, impotence, frigidity, perversion, homosexuality, undue fixation—all implying abnormality of sexual function and development—are all, it would appear, harmful to character or intellect even in matters at first sight totally unconnected with the sexual sphere<sup>1</sup>. It would seem indeed as though the sublimations are, at all levels of development,

<sup>1</sup> Of particular importance in this connection is the correlation between (sexual) object-love and altruism on the one hand and between (the more primitive sexual stage of) Narcissism and selfishness on the other.

dependent on, and constantly reinforced or nourished by, the sexual functions, so that any failure in the proper function and growth of the sexual trends of necessity occasions some defect or disturbance in the powers of sublimation.

In virtue of these factors (and probably of others which closer study of the subject would reveal), the relations between sex and sublimation are extremely intricate. Sublimation is in a sense directly antagonistic to sexuality, but it draws its energy from the same source and is even to some considerable extent dependent on the welfare of its rival.

There are of course many other difficulties and complexities connected with this subject which we have passed over. There is however only room here for brief consideration of three further aspects of our problem.

As regards the first of these, a difficulty arises in connection with the fact that the researches of Freud have shown that the sexual instinct is itself a highly complex thing, comprising many different trends and impulses, the majority of which are not directly concerned with the process of reproduction. The antagonism between Individuation and Genesis which we are here considering appears at first sight to be capable of accounting only for the repression of those aspects of sexuality which directly lead to reproduction, since it might seem that these alone constitute a biological menace to the principle of Individuation. To this the reply appears to be as follows.

(a) Just as from the biological and physiological points of view it was necessary to include under the heading of Genesis not only the matter and energy directly connected with the process of reproduction but also that indirectly connected with it, such as the food provided by the parent for the use of offspring, the energy involved in the provision of which is not available for purposes of Individuation; so also from the standpoint of psychology we must bear in mind that all the numerous sexual interests and activities which are only indirectly associated with reproduction involve the withdrawal of psychic energy from sublimation and are therefore hostile to Individuation. Although the exercise of the non-reproductive aspects of the sexual instinct does not lead to the impoverishment of the individual life by increasing the severity of the struggle for existence as a result of over-reproduction, it does lead to such impoverishment by reduction of the quantity of psychic energy available for work. As Bleuler has indicated<sup>1</sup>, human beings, owing to their ability to procure opportunities of enjoyment which are difficult

<sup>1</sup> *Op. cit.*

or impossible in the case of other animals, are constantly subjected to the temptation to pursue sexual activities for the sake of the immediate pleasure that they give. A particularly vigorous effort of repression is therefore called for in order to ensure the devotion of the necessary amount of energy to other purposes—purposes which, as Freud has pointed out, involve the renunciation of a nearer pleasure in order to obtain a more distant and permanent satisfaction that can be gained only by modification of the environment, *i.e.* by work. From this point of view the repression of the non-reproductive elements of the sexual tendencies is just as essential as a condition of increased Individuation as is the repression of the reproductive elements themselves.

(b) The reproductive and the non-reproductive elements of sexuality, although in their origin they appear to be to a large extent independent, are in the course of their development, as Freud has shown, firmly knit together. The sexual instinct of the normal adult consists of a more or less closely organised body of partial impulses under the hegemony of the directly reproductive trends; the non-reproductive aspects consisting for the most part of preliminary interests and activities which lead up to the reproductive act itself. This being the case, sexual repression in the interests of increased Individuation can no more afford to overlook the non-reproductive aspects of sexuality than can the sailor afford to neglect the distant cloud on the horizon which, harmless in itself, may yet be the forerunner of a storm. As a matter of fact, Psycho-Analysis has shown that it is indeed a general characteristic of repression to extend from the object at which it was originally aimed to other objects associatively connected therewith, so that many thoughts and tendencies, which in themselves would have escaped the censor, are subjected to repression merely because of their associations. This being the case, it is not surprising that the non-reproductive aspects of the sexual instinct (even were there no other grounds for their repression) should suffer repression on account of their close association with the process of reproduction itself.

Though the facts connected with the antagonism between Individuation and Genesis thus to a large extent necessarily prepare the same fate for both the reproductive and the non-reproductive elements of sexuality, it is worth nothing in this connection that the antagonism in question is—in human society at any rate—not without a certain differential action in this respect. The difficulties—ultimately, as we have seen, biological and economic—in the way of normal sexual gratification in adult life lead beyond all doubt to a far more frequent indul-



gence in perverse, homosexual and autoerotic activities than would otherwise be the case. Normal intercourse resulting in reproduction causes a prolonged or permanent impediment to Individuation; non-reproductive sexual gratification produces no such serious consequences and can therefore be indulged with relative impunity. It is true that the condemnation passed on abnormal or autoerotic sexuality is in some respects more severe than is that meted out to normal intercourse, which is of course permitted and even enjoined under certain conditions—conditions, be it noted, which imply that the responsibility for the consequences is to some extent being faced: this however is probably due (among a number of other causes into which we cannot enter here) to a dim realisation of the fact that abnormal and autoerotic practices are in some important respects easier and less dangerous, and therefore also more tempting and in greater need of inhibition. Fundamentally it remains true that in adult life the (social and psychic) impediments are in many ways greater in the case of reproductive sexuality and that in consequence there is a tendency for sexual energy to be deflected (or to regress) from normal, *i.e.* reproductive, aims to non-reproductive ends presenting fewer obstacles.

The second of the three final considerations mentioned above can be more briefly disposed of, though in truth its importance is such as to merit extensive treatment on its own account. The higher degrees of Individuation are—in human society—very largely connected with, or dependent on, the process of Socialisation. On the intellectual side, the individual can only attain the higher elements of culture through learning from his fellows, or through co-operation with them; as a result of which co-operation individuals are enabled to specialise in some particular branch of activity or culture and at the same time to derive the advantage of the work of others who have specialised in other branches. On the character side, this co-operation requires a high development of certain ‘moral’ or ‘social’ attributes, which in some respects, it is true, entail a sacrifice of individual aims, but which in other respects involve a greater individual development; such as is manifested for instance in the ability to subordinate immediate to ultimate ends and in increased powers of integration and control of impulse. To so great an extent is the increase of individual development in human beings bound up with the process of socialisation that the antagonism between Genesis and Individuation, as it applies to civilised societies, might, from certain points of view, almost as well be considered as a struggle between Genesis and Socialisation: for the

devotion of large quantities of energy to sexuality is antagonistic to the higher development of sociality in much the same way as it is antagonistic to the higher development of individuality (cf. the inverse correlation between birth rate and culture referred to above). The great importance of socialisation in the struggle for existence in the human race has brought it about that the qualities required for socialisation have played a very significant rôle in the later stages of human progress. Among these qualities the ability to 'get along' with our fellows and to accept their views and estimates is of particular importance and has probably undergone a special degree of development. It is in virtue of this fact that so many of the 'moral' impulses are connected with, or derived from, our relations with our fellow men, by way of fear, love, precept or example; so that it has appeared to some psychologists that repression in general, and repression of the sexual impulses in particular, is due to the operation of the 'herd instinct.' There is probably much truth in this view (though it is almost certainly an exaggeration to attribute all repression—sexual and otherwise—to this source) but from our present standpoint it is important to bear in mind that the influences inhibiting the sexual tendencies, which in human society may appear to emanate largely from the relations that connect us with our fellows, are only the representatives at this particular stage of development of forces that have been at work throughout the course of evolution, both in gregarious and in solitary animals.

The last factor which we can consider here is connected with the circumstance that, as a result of the repression to which it has been subject, a certain degree of inhibition has become, as it were, an integral part of the sexual instinct itself, which in human beings cannot attain full satisfaction unless it has to overcome some obstacle and, in the absence of any obstacle, tends to create one for itself. Modesty, coyness, shyness, secrecy, act not merely as hindrances to the manifestations of sexuality, but themselves constitute an essential aspect of these manifestations, a necessary link in the chain of processes that culminates in the reproductive act itself. When these resistances are lacking, sexuality tends to lose its charm; a too free, too rapid or too abrupt approach to sexual intimacy frequently resulting not in an increase but in a loss of sexual excitement. At times and places where the sexual inhibitions have been much reduced, sexuality (as Freud reminds us<sup>1</sup>) often ceases to exercise its usual fascination. Thus the freedom in sexual

<sup>1</sup> "Beiträge zur Psychologie des Liebeslebens," II. *Jahrbuch für Psychoanalytische und Psychopathologische Forschungen*, 1912, IV. 49.

matters characterising the decline of ancient culture occasioned a lowering of the estimation set upon sexuality, and it was only as a result of the great wave of asceticism during the next few centuries that sexuality regained (and probably increased) its value.

This important rôle of inhibition within the sphere of sexuality itself may probably be traced to two principal causes, which are however not entirely independent of one another.

In the first place it is due to the fact that the powerful and almost permanent inhibitions that affect the sexual instinct cannot be easily or suddenly removed. The release of these inhibitions can apparently only take place by gradual degrees in such a way that the ultimate expressions of sexuality are led up to slowly by a series of preliminary processes approaching ever nearer to the ultimate goal. If an attempt be made to short-circuit this process and to plunge straightway *in medias res*, the repressions are apt to gather strength in face of the emergency and to render the attempt abortive.

In the second place, it seems probable that mankind has, in a manner, made a virtue of necessity and has utilised the sexual inhibitions as a means of obtaining a greater quantity of pleasure as a result of the accumulation of energy that these inhibitions bring about. It would seem to be a general law of mental process that (within certain limits and under certain conditions) the greater the tension released by any action, the greater the satisfaction derived therefrom. In accordance with this law, the delay imposed on the gratification of sexual desires by the operation of the sexual inhibitions increases the enjoyment ultimately obtainable from sexuality. A certain degree of tension, involving inhibition and control, is therefore essential if the highest possible pleasure is to be obtained, and may come to be recognised as desirable, or even to be voluntarily sought as a means of increasing pleasure. The 'art of love,' apart from its endeavour to bring into play the various partial impulses which are not too severely repressed, consists principally of an attempt to obtain the maximum of pleasure from a skilful use of delays, inhibitions and restraints<sup>1</sup>. There is thus brought about at a higher level a veritable 'return of the repressed,' the inhibitions suffered by the sexual instinct having served but to add to its strength and to the satisfaction that it can afford. In this way it is

<sup>1</sup> One is naturally reminded here of the infant's method (to which Freud was the first to draw attention) of increasing pleasure by the retention of its stools. A parallel from adult (genital) life is to be found in the voluntary delay of, or even abstention from, orgasm practised by many persons.

possible to account to some extent for the fact that, although the sexual impulses of man are far more inhibited than those of other animals, man nevertheless appears to set far greater value on them and to derive greater pleasure from them than they do, and for the corresponding fact that, even within the human race, the more cultured individuals, in spite of their greater sexual inhibitions, may—provided they are not neurotic—derive a greater satisfaction from their (more complex and more controlled) sexual life than is obtainable through the freer (but simpler) sexuality of their less cultivated fellows<sup>1</sup>.

## V.

To the reader who has followed us thus far there may very possibly have occurred a consideration which is calculated to arouse both interest and astonishment. If the basis of sexual repression is to be found—principally or largely—in the antagonism between Individuation and Genesis, we should expect that the causes of this repression would before now have been to some extent well recognised. For, although some of the aspects of the antagonism which we have passed in review are such as would appeal only to the scientifically trained intelligence (*e.g.* the physiological, statistical and psycho-analytic aspects), there are other aspects which, we might think, would be apparent to any keen observer of human life. Thus the economic difficulties occasioned by a too rapid rate of reproduction should be recognisable by every one who has any considerable experience of poverty, and the further step to the conclusion that sexual inhibitions are not unconnected with these economic difficulties would seem to be, on intellectual grounds, both short and easy.

And yet we see that there has in fact been extraordinarily little recognition of this connection. It is true that an implicit recognition is involved to some extent in the behaviour of mankind; for, side by side

<sup>1</sup> This point of view perhaps constitutes the complementary (and more cheerful) aspect of the considerations brought forward by Freud, "Beiträge zur Psychologie des Liebeslebens," II. *Jahrbuch für Psychoanalytische und Psychopathologische Forschungen*, 1912, VI. 40 ff., as regards the suffering and renunciation of pleasure inevitably inflicted on mankind in virtue of the sexual inhibitions. It is true that the process of displacement, including sublimation, appears always to involve some renunciation of pleasure, the substitute-object being itself less satisfying (to our primitive tendencies at any rate) than the original object of desire. Nevertheless, the increased mental development involved in sublimation brings with it the possibility of greater pleasure; greater pleasure may therefore actually result when, on occasion, the barriers of repression are removed and the more primitive activities are once again set free.



with sexual repression in the sphere of mind, there have been developed in the sphere of action certain practices which aim obviously and directly at the same end as that which, according to our theory, constitutes at once the goal and the condition of the psychical repression of the sexual instinct. For while repression (together with its external and social equivalents, monogamy, late marriage, punishment and disapproval of extra-marital intercourse, etc.) leads to a slower rate of reproduction by reducing the amount of sexual intercourse, such practices as infanticide, abortion and prevention of conception achieve the same end by doing away with the consequences of sexual intercourse; and these latter, in varying proportions, together with unfruitfulness and chastity, have, as Malthus has shown, been at work in every portion of the human race as the 'preventive' check to population—which in turn is the only alternative to the more rigorous 'positive' check occasioned by the shortage of necessities. But though men have thus to some extent acted as though they understood the relationship in question, a real conscious understanding of this relationship has been very rare. Such recognition as has been manifested has moreover only too frequently been vague, hesitating and incomplete. Of course there can be no doubt that the application of the principle to individual cases has often enough been realised and that abortion and infanticide, like their less clumsy and more humane substitute contraception are, and have been, practised deliberately with a view to the avoidance of the difficulties which too numerous a progeny brings in its train. With the more educated classes of present-day society throughout the world the limitation of the family has indeed become a fundamental and almost universal rule of life. But in spite of this and in spite of the urgent practical importance of the questions involved, there has for the most part been a failure to draw the apparently easy corollary that in the difficulties and hardships imposed upon the individual by the excessive use of the reproductive powers are to be found the ultimate cause and justification of sexual restraint and inhibition.

This fact seems to indicate that human thought has here met with some peculiar inner difficulty, which has rendered progress in understanding the relationships in question more than usually hard, in spite of the relatively easy nature of the task from the purely intellectual point of view. Psycho-analysts will naturally seek the cause of this peculiar difficulty in some emotional inhibition, and our expectation that some such influence is really at work may well be strengthened by another fact of very great importance in our present connection, *i.e.*

the extreme reluctance to accept or even to consider the biological and economic principles associated with the name of Malthus—principles which may be said to coincide with an essential, perhaps the most essential, portion of the biological doctrine here advocated and applied. So great is the reluctance in question that the majority of educated persons are in almost complete ignorance of the nature and significance of these principles. But if we study the utterance of those who are to some extent conscious of the bearing of these principles on human life, we immediately become aware of the extreme distaste frequently felt towards Malthus's doctrine, the great difficulty that is often experienced in understanding it, the intense desire to show that it is false or that it does not apply to present-day conditions and the uncritical nature of most of the arguments advanced against it<sup>1</sup>. This is perhaps at first sight the more astonishing in view of the general acceptance at the present day of the evolutionary principles of Darwin and Wallace, which themselves were admittedly founded on the principle of Malthus. But at the same time we must remember that Darwinism was itself, not very many years ago, subject to a high degree of irrational opposition; so that we may suspect that unconscious forces are active in making the acceptance of both doctrines one of difficulty—forces which moreover are probably to some extent the same in the two cases.

A study of the forces here at work is of very considerable interest in connection with our present purpose and is moreover of great importance on its own account: for there can be no doubt that the inhibitions for which these forces are responsible have caused, and are still causing, the human race to exhibit an almost pathological degree of blindness in matters which most intimately concern its welfare—matters too which

<sup>1</sup> For a recent consideration of the invalidity of the arguments against Malthus's position, together with a statement of the facts indicating the correctness of his views, see J. M. Robertson, *The Economics of Progress*, 1918, also the works of C. V. Drysdale referred to above. A classical exposition of the subject is to be found in J. S. Mill's *Principles of Economics*, though an even fuller treatment is to be found in George Drysdale's at one time well-known work *Elements of Social Science* (last edition, 1905).

How powerful is the resistance against the realisation of the truth and significance of Malthus's doctrine may be gathered from the fact that, although few attempts, if any, are made to refute the doctrine by modern economists, still fewer attempts at systematic or impartial treatment are to be met with: while at the same time the subject is sometimes not allowed a hearing even when it is most obviously in place, as happened at a meeting held by an eminent scientific body a few years ago, when, during a discussion on the cost of living, a paper by an exceptionally qualified writer treating the subject from this point of view was rejected by the organising committee, although no other communication dealing with this fundamental aspect of the question was presented.

have the closest bearing on nearly all the great political and social problems of our time. The subject therefore undoubtedly deserves elaborate and extended treatment at the hands of the psychologist; for the elucidation of mass-delusions along psycho-analytic lines will probably constitute one of the most important and useful tasks of social psychology in the future. Such treatment cannot of course be attempted here: nevertheless the subject is sufficiently germane to our present theme to justify a first essay in this direction in the shape of a rough enumeration and description of some of the more important motives that seem to be at work in rendering difficult the understanding of the biological and social factors with which we have been dealing.

(1) Among the motives of a more general kind is one to which Freud has already drawn attention as playing a part in the resistance to the doctrines of Darwin, *i.e.* the blow to human Narcissism involved in the recognition of the fact that human life is essentially of the same nature, and is subject to the same conditions as that of the lower animals<sup>1</sup>. Just as it was unpleasant for man to abandon his claim to a special creation at the hands of the Divinity and to admit that he was of the same descent as his humbler brethren, so too it is unpleasant for him to realise that he is still subject to the same biological laws which control the destiny of the other animals; especially since these laws reveal the existence of an ever present danger to human life, which it would be much more agreeable to overlook. Man is (not unreasonably) a little proud of his unique position in the world of living beings and of the powers over the forces of Nature which he alone of these beings is able to wield. More particularly is he proud of his latter-day achievements in this direction, which have enabled him to modify his physical environment in a manner undreamt of by his ancestors and to gratify desires the fulfilment of which had up till comparatively recently seemed utterly impossible. It is humiliating to realise that in spite of this vast progress in the mechanical arts, man is still subject to the struggle for existence in essentially the same way as are the other animals, and that, increase production or modify distribution as he may, he cannot escape the fact that with him, as with them, the supply of the necessities of life is generally too small to provide a comfortable livelihood for the

<sup>1</sup> "A Difficulty of Psycho-Analysis," *International Journal of Psycho-Analysis*, 1920, I. 17. As Freud points out, this attitude of superiority is not one that is characteristic of the primitive human mind, infantile or savage; but it is evidently one that acquires great strength in the higher stages of culture. The study of this change in man's attitude toward the animals is an interesting chapter of psychology that has still to be written.

existing members of the race, much less for the immensely increased number that would result from a full exercise of reproductive power. In order to avoid the recognition of this painful fact there is a tendency to declare, first, that Malthus's principle of the pressure of population upon the means of subsistence is untrue; or failing this, that it does not apply to present-day conditions, with the greatly increased powers of production which we now possess (ignoring the fact that the population to be fed has increased concomitantly with the increasing supply of food); or, failing this again, that, although it may apply to the economic conditions as they exist at the moment, this need give us no serious concern, since the difficulties thus arising may easily be abolished in the near future—by such measures as increased emigration, cultivation of new land or intensive agriculture (neglecting again to take into consideration that, unless the ratio of population to subsistence be adequately controlled, any increased supply of necessities will be spent in maintaining a larger number of inhabitants at much the same economic level as before).

This then we may regard as the first of the great psychological difficulties in the way of an adequate realisation of the true cause of sexual inhibition—the blow to man's vanity involved in the recognition of the fact that, in spite of his exceptional capacity to bring about the satisfaction of his desires by the appropriate modification of his environment, he is nevertheless still subject to the law of Nature which ordains that the numbers of any given species shall be rigidly determined, not by the reproductive inclinations or capacities of that species, but by the supply of necessities that is available for the use of that species.

(2) A second factor of importance—one that is in certain significant respects related to the above—consists in the unwillingness of men to abandon a certain childlike attitude in virtue of which they are prone to believe that all their needs will in some manner be provided for without the necessity for forethought or effort on their own part. Such an attitude is fostered at a relatively conscious and superficial mental level by any social system in which the less thrifty and capable members of the community are (partially or wholly) maintained at the expense of the more able and far-seeing individuals. More fundamentally however the attitude is one that is adopted towards God or Nature rather than towards the community. It finds expression in such well-known phrases as "Bountiful Nature" and "Providence never sends mouths but it sends food" (statements which every serious student of biology and economics knows to be profoundly untrue in the sense that is intended) and may



be regarded as a particular aspect of a more general view, according to which the care of men is entrusted to the hands of a beneficent and ever watchful deity, whose constant vigilance relieves the human race of the necessity for foresight and makes it a virtue to "take no thought for the morrow," since to do otherwise would imply distrust of, or disbelief in, the deity in question.

In the light of Psycho-analysis it is easy to see that this attitude is principally derived (1) from the positive (or loving) elements of the parent-regarding complexes, the unlimited power and beneficence originally attributed to the parents being displaced on to the more abstract personalities of God or Nature; (2) from displaced Narcissistic tendencies which co-operate towards the same end, the omnipotence of the parent or of God being partly derived from a projection of the original (infantile) 'omnipotence of thought.' The concept of the monotheistic Christian God or of his more modern counterpart Nature is deeply imbued with this influence (the former representing—at least predominantly—a father substitute, the latter a mother substitute). Hence it comes about that the so frequently manifested blind confidence in the forthcoming of adequate sustenance for human populations, no matter how fast they multiply, represents a regression to an infantile level of thought and feeling, and is clung to with all the tenacity characteristic of early fixations; any attempt to overcome this confidence and to make an unbiassed scrutiny of the actual relationship between mouths and food being opposed with an energy that derives its force from a dim realisation of the fact that such a scrutiny would threaten with destruction the pious and pleasing delusions which have been built up round this subject; since it would show that the supposed guarantee of an ample supply of the necessities of human life at the hands of a beneficent deity does not in fact exist, and that, in consequence, man is, for the most part, dependent on his own efforts for such supply of these necessities as he may enjoy.

(3) While there are thus certain psychic mechanisms which make it difficult for us to realise that Nature herself (through her inability to provide sustenance for all who are or could be born) is responsible for the shortage of necessities that has led us in the course of evolution to restrain our reproductive powers, our past history and development have at the same time impelled us to look elsewhere for the cause of our troubles, thus adding an active factor of misconception to the passive factor of want of recognition considered under the last heading. The understanding and control of natural forces (such as are involved,

for instance, in agriculture or the construction of dwellings) belong to a comparatively recent chapter of human history. Before such understanding and control had been acquired, it was useless to turn to Nature for the alleviation of distress. On the other hand we have been accustomed all through our history (human and pre-human) to compete with other beings, belonging to our own or to some different species, for the available supply of food. The struggle for existence has indeed fostered this tendency, allowing those to survive who competed most successfully and eliminating those whose ability to assert themselves against competitors was insufficient. This being the case, we still tend in the face of any difficulty or disaster, to turn in anger against our fellow men rather than to seek for the explanation and correction of our troubles in terms of natural science. The arousal of individual, national or class hatred is thus a much easier matter than the arousal of interest in scientific remedies for sociological or economic troubles; and the hatred thus aroused may be responsible for lines of conduct directly opposed to the dictates of scientific economics. In this way for instance (to take an example from the sphere of class antagonism), capitalists and employers will oppose family limitation among the labouring classes on the ground that this may lead to a rise in wages, or Trade Unionists will limit production in order that their employers may have smaller profits or they themselves less fear of unemployment; immediate class benefits obscuring in both cases the greater advantages to be derived from harmonious co-operation in the limitation of numbers and the increase of supplies.

Not only is this tendency to seek a remedy for our troubles by aggressions on our fellow men biologically much more primitive and more deeply ingrained in human nature than the tendency to co-operate in the scientific examination and rectification of these troubles; the former tendency even undergoes a certain degree of secondary reinforcement under civilised conditions, where—owing to the complexity of social and economic factors (especially the use of money)—the difference in fortune between man and man becomes exceedingly conspicuous, while the fundamental facts connected with the production of food and other necessities are rendered difficult of observation. Under these circumstances it becomes only too easy to assume (with the imperialistically inclined) that all shortage of the necessities of life is due to the competition of other nations, peoples or races, or (with the socialistically inclined) to the injustice and tyranny of certain classes.

Here again, *parental complexes* are often at work reinforcing the

mistakes due to *instinctive tendencies* and to *faulty observation*; Nature being regarded, as before, as the beneficent mother who means well by her children, while the human enemies or oppressors are regarded with feelings derived by a process of displacement from those originally directed to the hated father.

In this manner there comes into existence (through the factors considered under this heading alone) a trebly supported opposition to the realisation of the true relationship between population and subsistence.

That these influences are still extremely powerful in our present-day society is revealed only too clearly by the fact that in the existing scarcity throughout great parts of the world, the method of dealing with the painful situation by means of wars, revolutions, strikes, fiscal barriers or legislation against 'profiteers' (*i.e.* by measures directed against our fellow men) is almost everywhere predominant over the more rational method of concerted effort to increase production (by measures directed to the control of natural forces). Hate—itself due very largely to the pressure of population upon the means of subsistence—having begot scarcity, this scarcity serves in its turn to perpetuate or to increase hate, and thus again to aggravate instead of to alleviate the scarcity. There is here a vicious circle from which (in the absence of any means of inducing a more reasonable attitude) there is probably no escape until—as has so often happened in the past—the destruction through strife, disease and starvation of large portions of the population shall have rendered possible a more ample supply of the necessaries of existence for those who survive.

(4) While keeping thus in mind the very significant fact that the struggle for existence has implanted in us a tendency to look to our fellow creatures rather than to Nature as the cause of any scarcity of food or other necessities that we may experience, this must not blind us to the correlative fact that the human mind has, in the course of its evolution, also acquired a tendency to overcome the impulses which lead men to fight and compete with one another. The immense advantages of co-operation and socialisation (with the moralisation that these imply) are obtainable only with the help of a very considerable degree of inhibition of the more primitive egoistic trends, and although this inhibition is phylogenetically a comparatively recent growth and therefore corresponds to the more superficial levels of the mind, its importance for our present subject is but little inferior to that of the egoistic and hostile tendencies themselves. The gregarious and social tendencies with their resulting inhibitions exercise a more or less constant

repressive influence on hatred and pugnacity, and in so doing tend to repress also the memory or appreciation of situations calculated to arouse strife or hatred. It has thus come about that, along with the unwillingness to perceive private causes of hostility between definite individuals (*e.g.* between the different members of a family), men have also been loath to recognise the existence of certain general causes of hostility. Among these general causes the scarcity of the necessities of life with the inevitably resulting competition (between individuals, classes, nations or races) is by far the most fundamental, the most widespread and the most persistent. All those persons whose predominant mental trends are largely under the influence of a powerful inhibition of the hostile impulses—including a very large proportion of political, moral and religious reformers—have therefore been at pains to overlook the continuance of the struggle for existence among mankind; or, if they could not overlook it, to prove that it need not exist; and modern Western culture, which has so largely taken its ideals from reformers of this stamp, has for the most part followed in this respect the biased guidance of its leaders. That Nature herself, through the disproportion between the powers of reproduction on the one hand and the available supply of nutriment on the other, is responsible for making every man to some extent the enemy of every other, is for most idealists a truth too unpleasant to be tolerated. Hence in minds of this sort there arises a potent reason for the rejection of the doctrines of Darwin, and more especially of those of Malthus (where the struggle for existence is more definitely brought into relation with mankind). The more sincere types of Socialism and Internationalism aim alike at the abolition of hostility and competition between the members of the human race, and both have been in a large measure blind to the powerful obstacles which Nature has placed in the way of the realisation of their ideals<sup>1</sup>.

In this respect our recent enemies the Germans would seem to have enjoyed a less distorted vision than ourselves. Although they may not have been altogether guiltless of sometimes placing undue emphasis on just those aspects of biology which seemed best to fit their pre-conceived political opinions, they were at any rate not blinded to the fact that the biological laws enunciated by Darwin indicated the inevitability of the struggle for existence so long as population continued to press upon the means of subsistence—a fact which many of our own thinkers,

<sup>1</sup> Of course I do not mean to imply that these ideals are necessarily unrealisable, but only that as a condition of their realisation the natural obstacles opposed to them must be faced and overcome, and not neglected.



misled by a more idealistic political philosophy, had overlooked. A sounder idealism of the future based on knowledge rather than on neglect of unpleasant realities may some day, we may hope, succeed in combining a genuine aspiration for the abolition of the cruelties involved in the struggle for existence with a due appreciation of the bearing of biological truths upon human social life<sup>1</sup>.

Within the sphere of national, as distinct from international, politics, the same influences have clearly been at work. The supporters of the doctrines of Malthus have almost always been conservatives or individualists of the tougher sort, while to the more tender minded among social reformers (from Godwin onwards) "hard hearted Malthusianism" has ever been repellent. To the prevailing socialistic tendencies of political thought Malthusianism is unacceptable, not only for the reasons considered under the last heading, but also because it implies a recognition of the circumstances making for hostility between man and man which the socialistic idealist is anxious to avoid. And yet it is only by taking the necessary steps towards overcoming the struggle for existence (*i.e.* by adjusting population to available subsistence) that any successful socialism would be possible.

But the doctrines of Malthus are unacceptable, not only for the reason that they draw attention to causes of hostility which, in virtue of our philanthropic tendencies, we would fain overlook. These doctrines are also unacceptable in a more positive way, inasmuch as they threaten to remove some of the means by which these tendencies are at present gratified. As a result of the development of the gregarious tendencies, charitable or kindly behaviour towards our fellow men has come to be in some respects a source of considerable pleasure. Pleasure of this kind can be most easily and satisfactorily obtained by the direct alleviation of the sufferings of those who are less well endowed with the good things of life than we ourselves. Malthusianism, although it promises a much more thorough remedy for social and economic troubles than any of the usual charitable activities—since it deals with the cause of the troubles and not merely with their symptoms—is yet in some ways less calculated to arouse the interest and enthusiasm of the charitably disposed: (*a*) because these latter are already concentrated on their own schemes of social reform, which they are usually unwilling to abandon, (*b*) be-

<sup>1</sup> It is interesting to note that the Government of Japan, in sending recently a number of official delegates to the American Birth Control League with a view to the study of Neo-Malthusianism in the United States, explicitly stated their conviction that the subject of birth control was of the greatest importance in connection with the prevention of war.

cause the advocacy of Malthusianism does not involve the actual *giving* of anything—an element which is essential to the full gratification of our charitable tendencies, (c) because Malthusianism ultimately threatens to do away with poverty altogether, and thus to deprive us of the pleasure we derive from the exercise of charity (the heightening of our self-esteem, the sense of our own power, the satisfaction of the displaced anal-erotic tendencies involved in giving and of the displaced parental feelings involved in protecting, etc.).

The subject of parental feelings brings us finally to one other cause of resistance to the Malthusian doctrine which can most appropriately be considered under this head. The sacrifice that parents are called upon to make on behalf of their children and the competition and hostility that are to some degree inevitable in the relationship between parents and children<sup>1</sup> naturally lead to some degree of resentment and hatred on the part of the parents—feelings which find their primitive expression in the widespread practice of infanticide, child sacrifice, exposure and abortion; but which, in the course of moral development, have necessarily been subjected to a very high degree of repression. Now abstention from conception is, from certain points of view, only a further stage in the series of actions involved in infanticide or abortion, and constitutes to some extent an expression of hostility to the unconceived child in the same way that abortion and infanticide constitute expressions of hostility to the child before or after birth respectively. The repression of child-hatred which has led to the condemnation of these latter practices has to some degree extended to the Neo-Malthusian practices of contraception. Hence the tendency to look upon contraception as being (like infanticide or abortion) a kind of ‘murder,’ since all three practices gratify the same repressed (murderous) desires—a tendency that is probably to a large extent responsible for the very frequent identification of contraception with abortion and for a considerable portion of the moral indignation felt against the former practice<sup>2</sup>.

(5) Connected also with the impulses making for gregariousness and socialisation is another factor of some importance, *i.e.* the tendency to feel faith and confidence in the existence or presence of large numbers of our fellow creatures. Human history has in the main favoured the creation of large communities, which (provided that economic conditions permitted of a relatively dense population), both because of the

<sup>1</sup> Cf. the present writer's *Psycho-analytic Study of the Family*. 1921.

<sup>2</sup> There are of course certain other important reasons for the identification in question. Cf. below, p. 268.

gains accruing from the division of labour and from the more active social and mental life characteristic of thickly populated districts and also because of their greater power in war, usually proved superior to their smaller neighbours, whom they eventually for the most part either exterminated or incorporated within themselves. The human race, having thus learnt in the course of evolution to appreciate the advantages of numbers, is apt to regard with distrust any social tendency that makes or seems to make for smaller populations. Now, as we have seen, recognition of the conflict between Individuation and Genesis implies also a recognition of the fact that superior individual development often requires a sacrifice of the absolute numbers of a community<sup>1</sup>. This sacrifice is—in virtue of the tendencies just mentioned—contemplated with alarm, and the doctrine which seems to point to the desirability of this sacrifice is consequently neglected or repudiated.

That the faith in numbers still constitutes an influence of very genuine importance has been illustrated very forcibly in recent years by our confidence in the irresistible power of the 'Russian steam roller' at the beginning of the war and the corresponding fear of Russia on the part of Germany—both confidence and fear being, as it turned out, exaggerated in consequence of a failure to take due account of qualitative as well as quantitative factors. Another illustration is afforded by France, where, in spite of a very widespread application of Malthusian (or, more strictly, Neo-Malthusian) principles in private life, there exists something in the nature of a panic with regard to the low birth rate and stationary population—a panic that is resulting in a wild clamour for more births without any realisation of the conditions or consequences of a higher birth rate<sup>2</sup>.

This tendency, in so far as it is due to the action of gregarious or social impulses, is apt to be powerfully reinforced by displaced self-regarding (Narcissistic) impulses, which, through an identification of the self with the community<sup>3</sup> or state to which the individual belongs, sees in the increasing numbers of the latter an increase in the glory or safety of the Self—and is therefore unwilling to countenance anything that may reduce the population of the state, since in any such reduction it is apt to see a menace to the Ego. This factor is, in its turn, intimately connected with one that we shall consider below (6 B).

<sup>1</sup> Though (owing to the correlation between birth and death rates to which we have already drawn attention) this sacrifice is usually less great than is imagined.

<sup>2</sup> This panic has now resulted in legislation directed against the use of contraceptive methods—legislation which, if it is in any way effective, will almost certainly result either in an increase in the death rate or in an increase of the practice of abortion.

<sup>3</sup> Cf. Ernest Jones, "War and Individual Psychology," *Sociological Review*, 1915.

(6) Perhaps the most important—and certainly the most direct—of all the influences opposed to the appreciation and understanding of the views of Malthus is derived from the sexual impulse itself. Sexual activity is (apart from inhibitions) easier and far more pleasant than activity along the lines of the various sublimations that underlie the process of Individuation; and, just as the cruder sexual tendencies are throughout opposed to efforts at displacement, so here too they are opposed to the recognition of a situation which urgently demands the abandonment or curtailment of sexual pleasure. It is unpleasant to realise that civilisation, with the process of individual and social development that this entails, requires an almost constant inhibition of some of the most powerful tendencies of human nature and a sacrifice of some of the greatest human pleasures<sup>1</sup>; and the doctrine of Malthus as the most explicit formulation of this painful fact appears therefore quite especially distasteful.

The situation as portrayed by Malthus himself does indeed present itself in a particularly gloomy aspect, since according to his view it would appear that the abolition of over-population with its attendant evils of poverty, war, disease and premature death requires the very extreme degree of sexual inhibition involved in the postponement of all sexual relations till relatively late in life. Under the system of Neo-Malthusianism advocated by most modern followers of Malthus the outlook is by no means so depressing (though it is not without certain psychological difficulties of its own), since the sacrifice of sexual satisfaction involved is far less. The skilled use of Neo-Malthusian methods is however (chiefly on account of the sexual inhibitions attaching to them, cf. below, 6 B, 6 C, and 7) still comparatively little understood by the great majority of persons even in modern civilised countries; consequently the reduction of the sexual sacrifices required is imperfectly realised and Malthusianism is still very largely associated with the idea of painful and irksome restrictions upon sexual activity. Hence a great resistance to the doctrine which appears to render these restrictions necessary.

Allied to this resistance of sexual origin are a number of other factors which, since they manifest themselves in close connection with this sexual resistance (and are often superficially indistinguishable from it),

<sup>1</sup> It is probable that the unpleasure aroused in this connection is, in the case of many individuals, related to the existence of a powerful castration complex—the idea of castration being frequently associated with the earliest inhibitions of (infantile) sexual activity.



may perhaps best be classed as sub-groups under the present heading. The most important of these factors are as follows:

(6 A) At certain primitive levels of thought there appears to be a confusion between human fertility and the fertility of the plants and animals which serve for human food. This is shown in a very considerable number of primitive religious and social customs, underlying which are ideas such as the following: that barrenness in a woman or impotence in a man may cause infertility in crops or herds, that human incest may cause infertility both among men and among animals and that the fertility of plants or animals may be increased by the vigorous practice of sexual intercourse by human beings (a supposition which has encouraged the holding of sexual orgies at certain times of the year; such orgies—in actual or symbolic form—being a prominent feature of festivals of the Carnival type<sup>1</sup>). It is not necessary here to enter into the psychological causes of this confusion<sup>2</sup>: it is sufficient to point out that this confusion must of necessity prevent a proper appreciation of the true relations between population and the means of subsistence, since it identifies the very factors which in any such appreciation must be rigorously kept apart.

It is only fair to add however that this factor is doubtless operative to a much greater extent among primitive communities than among modern civilised societies, although relics of its influence may still be found among the more pastoral and agricultural sections of the latter.

(6 B) For a variety of reasons, into which again it is not necessary to enter here<sup>3</sup>, the Narcissistic tendencies find a very special degree of satisfaction in the development and exercise of the reproductive functions and a corresponding dissatisfaction in anything that appears to entail a weakening or atrophy of these functions. Owing to the strength of

<sup>1</sup> *Vide e.g. Frazer, Spirits of the Corn and the Wild*, II. 332 ff.

<sup>2</sup> Which are doubtless complex in nature, but in which the following four factors will probably be found to be of importance: (a) the projection of human sexual desires on to Nature, in connection with the repression of these desires, (b) the Totemic identification of animals or plants with human parents, (c) the 'omnipotence of thought' manifested in the control of the food supply by homoeopathic magic, (d) a 'return of the repressed,' in so far as the practice of this magical control furnishes an excuse for the indulgence of sexual activities which would be otherwise prohibited.

<sup>3</sup> They are doubtless connected in the ultimate resort with the biological conditions which make it advantageous for any race or individual to have reproductive powers and tendencies as vigorous as the economic conditions of life and the energy required for purposes of Individuation will permit (conditions which were considered in Section III of this paper); and also, more immediately, with the factors referred to under headings 1 and 5 of this Section.

the general sexual inhibitions in modern societies, our pride and joy in the use of the sexual organs can no longer find expression in the crude manner characteristic of the phallic cults of more primitive ages: but some remnants of our former attitude in this matter are still shown: positively, in the continued employment of phallic symbolism; negatively, in our somewhat morbid fear or disgust of anything that threatens the existence or activity of the sexual organs, *e.g.* castration or impotence. The tendencies underlying this attitude ally themselves with the motives which lead us to have confidence in a numerous population and distrust of any decrease of population or of any diminution in the rate of increase—motives which we have already studied (5 above).

That these tendencies are in reality derived from the psychic sources to which we have just referred is shown by the fact that those who extol most lavishly the benefits of a high birth rate and who exhibit most alarm at the voluntary control of births (which they are fond of designating 'race suicide') are to be found chiefly among old men and women (whose sexual power has departed or is declining), or else among confirmed bachelors, celibate priests or unmarried women. In the case of these persons there has probably occurred a *projection* of the primitive pride in fertility and sexual potency or of the fear resulting from sexual inhibitions or from impotence. The pride that would find a more primitive expression in the individual's own fertility or potency is displaced on to the fertility of the race or community, with resulting joy in a high national birth rate, fear of a decline in the birth rate and hatred of any doctrines or social movements calculated to bring about any such decline<sup>1</sup>.

(6 C) There is also another way in which the Narcissistic tendencies co-operate with the reproductive trends to make the Malthusian doctrines appear unwelcome. Among the most common and important forms of displacement of the Narcissistic elements of the Libido is the transference of love from self to offspring—an individual's children being

<sup>1</sup> In actual practice this attitude is effective in preventing a proper appreciation of the Malthusian doctrines not only by direct opposition, but—especially in so far as it works with modern statistical weapons—by fostering an undue concentration of attention on birth rates to the neglect of death rates and other important factors which must be taken into account in any unbiased consideration of the problems of population; the subject of birth rates being of course more in the direct line of displacement of interest in minds of the type here referred to. So great is the distortion thus introduced that the more violent type of 'répopulateur' seems often to be of the opinion that population depends simply upon the birth rate, as if such factors as death rate, immigration and emigration did not exist!

regarded as an extension or a re-incarnation of himself. The love of our children constitutes at once a socially more permissible and a biologically more advantageous form of Narcissistic gratification than the cruder forms of conceit or auto-erotic satisfaction; while the continuation of our own lives through those of our children and our children's children affords us at the same time the nearest possible approach to the immortality which, in virtue of our Narcissism, we so earnestly desire. It is therefore not surprising that the displaced tendencies which have found a satisfactory substitute in this way oppose everything which threatens to rob them of this substitute. Now it can scarcely be doubted that the practice of Malthusianism does bring with it a certain degree of danger to the continuance of the individual family. The process of 'peopling down' to a relatively high level of comfort entails—except under unusually favourable circumstances—such a limitation of the numbers of the children born to each marriage, as to expose the family to greater danger of extinction through accident or disease. This real increase of danger to the continued existence of any given family under a Malthusian régime is apt to be exaggerated in imagination: (a) through reinforcement by unconscious psychological factors, particularly those referred to under (6 B); (b) through failure to take into account that the increased danger in question is to some considerable extent counter-balanced by the fact that a decrease in the number of children per family usually brings with it a more favourable environment for each individual child, the increase of danger to the family as a whole being thus by no means directly proportional to the decrease in the number of children, as is sometimes erroneously assumed. The fear thus engendered and exaggerated is apt to exercise a very real influence in the rejection of Malthusian ideas<sup>1</sup>.

(7) Just as the combative tendencies constitute a difficulty in the way of realising the true relations between population and subsistence,

<sup>1</sup> It is interesting to note however that the real danger on which the fear rests (and consequently to some extent the fear itself) may be expected to diminish somewhat as the practice of Malthusianism becomes more universal. At present those who do practise family limitation are forced to 'people down,' not only to the limit required for the preservation of their own standard of living, but to the still lower limit required for the provision of a surplus devoted to the partial maintenance of the large families of those sections of the community who produce more children than they themselves are able to provide for. In so far as the latter classes in turn adopt the practice of family limitation, the burden of providing for those who cannot support themselves or be supported by their own families will become less, with the result that (other things equal) a rather larger number of children per family will become possible in the case of the upper and middle classes, upon whom this burden principally falls.

both in virtue of their positive manifestations (3 above) and their negative or reactionary manifestations (4 above), so too in the case of the sex impulses difficulties ensue not only from the fact that the theory and practice of Malthusianism is directly opposed to the unimpeded function of these impulses but also from the fact that (paradoxically enough at first sight) Malthusianism is also in some important ways opposed to the repressive forces working against the sex impulses and to the reaction formations that have resulted therefrom. Malthusianism is repellent not only because it reveals the necessity for sexual inhibition, but also because it is too intimately concerned with sexual matters, appeals too strongly to sexual interests and desires and even appears in some respects to open up greater possibilities of sexual freedom and enjoyment; so that the far-reaching and elaborate sexual repressions which have been built up in the course of the struggle between Individuation and Genesis become in their turn operative in preventing the recognition of the relevant biological and sociological truths. The objections to Malthusianism springing from sexual inhibitions are indeed so powerful and persistent that they share with the political objections the rather doubtful honour of being (to a superficial view at any rate) the most striking of all the psychological factors which oppose their influence to unbiassed discussion and consideration of the problems involved.

This influence manifests itself in the first place as a general deterrent to all direction of thought upon matters connected with the sexual life: in this respect questions concerning population suffer no more and no less than any other problems dealing with sex. The sexual repression however also affects Malthusianism in more specific ways: first, owing to the fact that the consideration of birth limitation involves an inquiry into the intimacies of married life—a sort of reserved territory which has been left relatively free of prohibitions on condition that it is not too often or too openly discussed; secondly (and this is certainly the more important factor), because Malthusianism in its most popular and practicable form of Neo-Malthusianism—revealing as it does the possibility of indulging in directly sexual pleasures without incurring the penalty of parenthood, with the resultant sacrifice of Individuation—threatens to remove one of the most deep-rooted biological foundations of sexual repression, and therefore calls up a more than usually vigorous activity on the part of this repression. Hence the very widespread fear of ‘immorality’ as a consequence of the general knowledge of contra-



ceptive methods, the tendency to taboo these methods as degrading<sup>1</sup> and the desire (manifested especially by the Roman Catholic Church) that marriage—and sexual intercourse in general—shall not be freed from its 'natural' penalties. The widespread and powerful nature of the repressive forces here at work is illustrated not only by the published pronouncements of those numerous persons who are very seriously alarmed at the prospect of sexual pleasures being obtainable without the deterrent effect of the probable resulting conception, but also from the very remarkable (one might almost say pathological) blindness and ignorance of large sections of our population as regards the existence and obtainability of contraceptives, many city dwellers passing almost daily before shops where these articles are sold but never realising consciously the nature and purpose of the goods displayed or advertised.

This fear of sexual pleasure apart from reproduction is beyond doubt a very fundamental aspect of human sexual inhibition, being connected both generally with the repression of the various 'partial' sex impulses and their subordination to the purposes of reproduction and more specifically (as Bleuler<sup>2</sup> has emphasised) with the repression of onanism. It finds its biological justification in the fact that (as we have seen in the earlier parts of this paper) the conflict between Individuation and Genesis manifests itself not only on the economic level through the inverse relationship between numbers and individual development necessitated by a limited food supply, but also on the physiological and psychological levels by the competition of the two antagonistic processes for the available supply of vital energy. We are however not strictly concerned at this point with the individual and racial origins of this fear of sexual pleasure when divorced from reproduction, nor with the conditions in reality to which it may be said to correspond; consideration of which will fall more appropriately into our concluding Section. It is here sufficient to have pointed out the very important part which this fear plays in producing the inability to realise the nature of the biological and psychological factors to which the present paper is devoted.

<sup>1</sup> The method most frequently employed for this purpose at the present time is to identify, or to confuse them with the (illegal) methods of producing abortion—a result probably due largely to the co-operation of other motives, particularly those enumerated under the headings 4, 6 B and 6 C: the 'murder' of the embryo in abortion or of the spermatozoon in preventive intercourse being (unconsciously or semi-consciously) regarded either as a gratification of (repressed) death wishes (4) or else as symbolical castration (6 B and 6 C).

<sup>2</sup> *Op. cit.*

## VI.

The lengthy considerations brought forward in the preceding Section have, we may hope, served not only the more immediate purpose of affording some explanation of the fact that our present views on the ultimate nature of sex repression, in spite of their simplicity, have not hitherto been generally or explicitly recognised: they have also, we should like to think, helped us to realise how great are the psychological difficulties in the way of a true understanding of some of the most fundamental problems of ethics, sociology and economics with which humanity is faced and how hard it is, in consequence, for humanity to find a satisfactory solution of these problems. In so far as our analysis of these difficulties has been correct we may perhaps even hope to have contributed in some very slight degree to the great task of freeing humanity from these difficulties and of making possible the adoption of a more unbiassed and reasonable attitude in matters which so intimately concern human welfare and human destiny. Having accomplished this much by the severe and not always attractive methods of biological and psychological analysis, we may perhaps be permitted in conclusion to take a few steps along the easier and more alluring path of speculation, in order to contemplate the possibilities of future development which our considerations may have opened up.

Our discussion of the difficulties in the way of a full and general recognition of the biological facts underlying sexual repression and of their practical and theoretical bearings is certainly not calculated to make us expect that this recognition will necessarily occur very soon, very suddenly or very rapidly. Indeed the difficulties in question seem to be so formidable that it would not be altogether surprising if such recognition were postponed for a very lengthy period. On the other hand the following significant facts: (*a*) that unwelcome scientific views, such as those of Copernicus, Darwin and Freud, have been or are being accepted by humanity; (*b*) that the present general trend of psychological evolution is probably towards conscious realisation and control of difficult problems rather than towards blind repression<sup>1</sup>; (*c*) that the biological conditions of sexual repression are directly connected with other biological conditions that are already generally recognised; (*d*) that the recognition in question holds out the possibility of bringing a higher degree of satisfaction than would otherwise be possible to some of the

<sup>1</sup> Cf. the present writer's paper on "Freudian Mechanisms as Factors in Moral Development," *This Journal* (General Section), 1917, VIII. 475.

most powerful human impulses (through diminished work and increased sexual enjoyment) and therefore appeals strongly to the impulses in question—all these afford considerable justification for believing that the difficulties, however great, will be overcome and that some pretty general degree of recognition of the biological influences concerned will be achieved in the not too distant future. We must bear in mind moreover that the process of recognition will be immensely accelerated as soon as the economic and political implications of the biological facts become realised and adopted by any of the political leaders of the great nations.

Supposing then such a general recognition to take place, what prospects does this open up?

There are in the first place the biological and economic consequences, with which we are less immediately concerned here, but which are of immense importance, both directly in themselves, and also indirectly as regards their psychological effects. A full and clear recognition of the principles of Malthus and their application to modern problems would at once open up the possibility of abolishing the struggle for existence among civilised communities and of thus doing away with the root-cause of poverty and one of the principal causes of war. Whether these results would follow quickly, or at all, is of course in its turn a matter of uncertainty. It is quite conceivable that, even though the possibility of abolishing the struggle for existence were fully recognised, mankind as a whole would still elect to continue—at any rate for a time—in a state of over-population and competition for the necessaries of life. The influences that had been at work in preventing the realisation of the principles of Malthus would not of course cease to act in general because they had been overcome in one particular; and it is probable that some of them would continue to operate so as to prevent the cessation of the struggle for existence.

To mention two points only in this connection: (1) It is obvious that the conscious and deliberate restriction of births in order that the number of those born should not exceed the number of those that can be fed—a procedure that would of course be necessary to bring about an end of over-population—is bound to arouse many difficult questions calculated to stir up national or racial hatred. Some nations or races would have to be content with a population little if at all exceeding that which they possess at present, while other nations or races would be capable of great expansion in this respect. There can be little doubt that this fact will give rise to fierce international or inter-racial dis-

putes that may not infrequently be settled by the arbitrament of war. Furthermore, it will very often be the more cultured nations or races which are least capable of further increase of population (since their territories will be already thickly populated), and this will augment their unwillingness to permit themselves to be outnumbered by their neighbours. This in turn will probably lead to an attempt to enforce a restricted birth rate upon the culturally inferior populations—a measure which may indeed in the first place be necessary for the preservation of the higher races, but which cannot be carried out without much friction and considerable exercise of force in one form or another.

Similar difficulties will to some extent arise within each nation; the poorer and less thoughtful classes will at first in all probability have to be compelled (by punitive measures or otherwise) to restrict their families within the limits imposed by economic conditions—a matter of no small difficulty and delicacy and one that is only too likely to arouse fierce class prejudices and hatreds.

(2) There is the more definitely psychological factor connected with the fear of the moral consequences of the abolition of the struggle for existence. We had occasion to refer to one important aspect of this fear at the end of our last section—the alarm caused at the prospect of sexual pleasure being freed from the restraints caused by the likelihood of resulting conception. This alarm will perhaps long continue to make the general use of contraceptives one of difficulty and will therefore tend to prolong the struggle for existence by preventing an adequate degree of birth control. There are however other more general aspects of this fear of moral consequences which will also exert an influence against the cessation of the struggle. There is, perhaps, above all a fear lest easier conditions of life should engender a slothfulness and lack of energy which would be fatal to human progress; a fear calculated to bring about a stern and puritanical attitude, which may long act as a counterbalancing force against the influences making for abolition of the struggle<sup>1</sup>.

<sup>1</sup> The question of the justifiability of this fear is a fascinating subject, the full discussion of which would carry us too far away from the theme of the present essay. It has to some slight extent already been treated in the present writer's paper on "Ethics and the Struggle for Existence," *International Journal of Ethics*, 1915. We can therefore only suggest here that there are three points of principal importance to be borne in mind in this connection.

(1) In the last resort the whole or at any rate a great portion of all vital phenomena can be reduced to reactions to stimuli; stimuli being effective in producing reactions in proportion to the extent to which they are related—positively or negatively—to the



There are therefore good reasons to make us think that even though the possibility of abolishing the struggle for existence through the application of Malthusian principles were fully recognised by civilised peoples, the actual abolition of the struggle might be long delayed by further difficulties of a sociological or psychological nature. Nevertheless, as in the case of the conscious recognition of the Malthusian principles which we were just now discussing, it would seem that the appeal of these principles to fundamental human desires (including of course those more sublimated desires which we call 'ideals') is too strong to be permanently withstood, and that sooner or later a serious attempt will be made to put them into practice on a large scale, so that the struggle for existence as it affects civilised portions of the human race will definitely cease—for a time at any rate. A step of tremendous importance in human history will thereby have been taken; mankind having freed itself from

needs of the organism. When all the needs of the organism are fulfilled there is no longer any necessity for it to react. Now the abolition of the struggle for existence will certainly tend to reduce the number of stimuli (including the inner stimuli arising from unfulfilled organic needs) that are effective in this sense, and therefore will in the main also tend to produce a reduction of vitality.

(2) The question is complicated however by the fact that the needs of complex organisms (especially civilised man) go far beyond the mere provision of the necessities of existence, and would therefore not be automatically gratified by such provision. It would sometimes seem as if in man, in proportion as the more material needs are provided for, the more complex needs take the place of the simpler ones that are already satisfied; so that the individual tends to strive for ever more remote and difficult ends; the struggle for luxuries (in the widest sense of this term—including all objects of desire that are not essential to the preservation of life) thus gradually being substituted for the more primitive struggle for necessities. Whether the energy evolved in pursuit of these more complex desires is equivalent to that evolved in the pursuit of the more simple and essential ones, is at present still uncertain. Judging from the actual degree of activity manifested by primitive races or the lower classes of civilised races as compared with more advanced races and the higher classes of civilised races respectively, it might seem that there is a gain rather than a loss of energy through reduction in the intensity of the struggle for existence. Psycho-analytic study has however made it appear probable that the higher sublimations are only achieved as the result of repression of, or opposition to, the simpler forms of desire; so that, in so far as the abolition of the struggle for existence at the same time does away with the necessity for some of the (sexual) repressions concerned, there is perhaps some reason to fear a resulting loss of energy. As we shall see however, in a moment, some considerable degree of sexual repression will continue to be biologically necessary, so that the loss from this source may not be very great and may even be quite compensated by the increased energy available through reduction of neurosis.

(3) In any case it is certain that the energy expended by mankind after the abolition of the struggle for existence cannot permanently fall below a certain fairly definite amount; for if it did so, the supply of necessities produced would be less than that required for maintaining the smaller or more slowly increasing populations existing under a system of universal birth control, so that the struggle for existence would automatically recommence.

many of the biological influences which have determined its evolution (in common with the evolution of all other living beings) in the past and having acquired the means of shaping its own destiny according to its own desires to a far greater extent than had hitherto been possible. Such a step must necessarily bring in its train sociological, moral, economic and psychological consequences of the greatest possible significance—consequences as regards which however we cannot allow ourselves even the liberty of speculation here.

Let us rather turn in conclusion to a matter more definitely germane to our present subject—the question as to what effect the general recognition (in theory and practice) of the Malthusian principles and of the more inclusive Spencerian principle of the antagonism between Individuation and Genesis would have upon the sexual tendencies themselves and more especially upon the repression of these tendencies. It would seem that this process of recognition would in many important respects be analogous to the psycho-analytic cure of an Anxiety Hysteria in an individual patient. Just as the patient learns to understand that the real cause and justification of his anxiety does not lie in the object consciously feared but in some unconscious wish that is terrifying to his conscious personality, so the human race as a whole will come to understand that sexual thoughts, sexual desires and sexual actions are not in themselves immoral or disgusting, but are only undesirable in so far as they tend to prevent the proper development of the individual or the social life, either indirectly through the effects of over-population, or directly through the withdrawal of excessive amounts of energy from work and sublimation. Moreover, just as the individual patient after a successful treatment acquires a freer attitude towards the objects of his fear (which are also the objects of his desire) and is able to allow a greater degree of satisfaction to his Libido, without thereby endangering his sublimations, so too, in all probability, will the community be able to adopt a more frank and natural attitude towards the human sexual impulses, substituting rational insight and conscious control for methods of blind prohibition and taboo. This attitude will on the one hand facilitate sublimation (since under the taboo system many sublimations are throttled *in statu nascendi* by too great repression or too stringent external prohibitions in the early stages of displacement) and tend to free us from the more obsessive aspects of sex. On the other hand it will almost certainly lead also to a somewhat greater indulgence in sexual gratification than is at present customary with cultured individuals and races, since the study of nervous disease has clearly shown

that under existing conditions repression of the sexual desires is often carried to unprofitable excess, leading not to sublimation but only to neurosis.

With regard to the actual degree of sexual indulgence permitted, it is probable that a fairly clear distinction will have to be drawn as regards two aspects of the antagonism between Individuation and Genesis, *i.e.* on the one hand the threat to Individuation arising as a consequence of over-reproduction and on the other hand the similar threat arising as a consequence of under-sublimation. In the past both aspects of this antagonism have been largely concerned in sexual repression, the proper development of the individual being impeded at least as much by the shortage of necessities resulting from over-reproduction as by the competition of the more primitive sexual interests with the tendencies to work. In the future however, granted a more complete understanding of the biological tendencies underlying the sexual inhibitions and a more thorough and universal mastery of contraceptive technique, it would seem as though the influences emanating from the factor of over-reproduction would become far less operative than the influences connected with under-sublimation.

With regard to the former, it may be said that with the elimination of over-reproduction one of the most essential reasons for sexual inhibitions will have been removed. All those restrictions which had their ground—directly or indirectly—in the need for diminishing the rate of reproduction (*e.g.* postponement of marriage till relatively late in life, the harsh treatment of extra-marital unions, even to some extent the insistence on monogamy) will—*so far as this point of view is concerned*—become no longer necessary. Social disapproval will tend to fall less severely on those who freely indulge their sexual appetites than upon those who produce more children than they are capable of maintaining; since it will be recognised that (again, *so far as this aspect is concerned*) it is the latter and not the former class of persons whose behaviour constitutes the real danger to the prosperity of the community. There will thus be a very considerable transvaluation of values in the sphere of sexual morality—a transvaluation that should contribute immensely to mental health and freedom from neurosis.

The lifting of sex taboos should also produce a freer attitude not only towards normal heterosexuality but also towards the perversions—since it will be recognised that perversions do not threaten the community with over-reproduction and are therefore permissible, in so far as they are otherwise harmless: though, for reasons to be mentioned, it

is probable that the activity of the partial impulses insufficiently subordinated to the normal sexual goal will continue to suffer a greater degree of inhibition than normal adult sexuality itself. At the same time the (absolutely) greater freedom accorded to this latter should facilitate normal sexual development and render the perversions less common than at present.

A rather different prospect presents itself when we consider the effect on the sexual impulses of the need for sublimation. The abolition of the struggle for existence will doubtless render the necessity for work less urgent, less irksome and less insistent: nevertheless this necessity for work (and therefore also the necessity for the sublimations on which work depends) will undoubtedly persist, because (as we have already seen, p. 272, footnote): (a) in the absence of an adequate quantity of productive labour the struggle for existence would return, owing to an insufficient supply of necessities; (b) the gratification of the simpler human desires usually results in an intensification of the more complex, sublimated desires—leading to a demand for an increased supply of luxuries, in addition to the (now adequate) supply of necessities. The need for work arising from these causes will keep in existence that aspect of the antagonism between Individuation and Genesis which consists in the competition between sex impulses and sublimation for the available supply of psychic energy. In this competition the energy devoted to sublimation will probably continue (as at present) to be derived principally from those aspects of the partial sex impulses which are not incorporated into the normal adult sexual constitution. It is these non-reproductive aspects of sex which will therefore suffer the greatest amount of repression as a preliminary stage to sublimation. Nevertheless, the sexual instinct, even when deprived of these constituents will continue to be strong enough (especially when reinforced as a result of the cessation of over-reproduction) to become a serious rival to the processes of sublimation. There will therefore almost certainly continue to be a very considerable degree of inhibition of normal adult sexuality arising from this source. Men will be constantly under the necessity of resisting the more alluring sexual interests and activities, in order to bring sufficient mental energy to bear upon their work.

Just how far this inhibition will go it is difficult to foresee. All that can be said with certainty is that the energy devoted to work—and withdrawn from sex—cannot permanently fall below the amount necessary to avoid a recurrence of the struggle for existence. How far it will be



above this amount depends upon a variety of factors:—in some measure, no doubt, on the element of competition, those individuals, communities or races which are most successful in sublimation tending to dominate over those who are more pleasure-loving (this leading to a race for domination, in the course of which the competitive, combative and self-assertive tendencies will be played off against the sexual trends); in a greater measure upon the fact that individuals or communities belonging to the former (more sublimating) class will—other things equal—become more numerous than those belonging to the latter (more pleasure-loving) class, since by their greater powers of work they will (quite apart from war or competition) be able to support a larger or more rapidly increasing population; lastly in some measure also upon the extent to which man's mental organisation leads him to evolve fresh interests and desires in proportion as his simple and more primitive needs are fulfilled. If, as is sometimes supposed, there is in man's nature some forward urge, which compels him to ever higher and more complex activities, it is difficult to see any limit to the extent of sublimation, except that imposed by the necessity of maintaining the race. If, as seems to the present writer on the whole more likely, the tendency to sublimation is dependent upon the repression of more primitive trends, we may expect sublimation to diminish, or at least to increase less rapidly, in proportion as the easier circumstances brought about by a more complete adaptation to a civilised environment gradually diminish the necessity for effort, and therefore for repression; so that eventually a state of equilibrium will be attained in which the necessary degree of sublimation will be achieved at a minimum sacrifice of sexual pleasure.

Finally, considering the question from the ethical rather than from the biological standpoint, it would seem that the relative amount of energy devoted to sexuality and sublimation must in the last resort depend upon our views as to the nature of the goal of human life. If the Supreme Good is to be found in continual striving after ever more perfect, more complex and more harmonious forms of activity, in the constant increase of our power and knowledge, our duty will lie in the direction of the maximum of sublimation that is compatible with mental health and with the preservation of the race. If, on the other hand, pleasure is the highest end in life, the less sublimated activities would appear to be ethically preferable, provided sublimation be carried far enough to ensure "the greatest happiness of the greatest number"; in this case the pleasures connected with the exercise of the sexual functions will be assured of a high place in the scale of moral values. It is of course

possible that on further investigation these two views may not prove to be so incompatible as they at first appear; but, in the pursuit of our present purpose, the establishment of this antithesis is as far as we dare venture.

## VII.

### SUMMARY.

I. Attention is drawn to a factor of great generality in connection with the biological foundation of sexual repression.

This factor consists in the antagonism between Individuation and Genesis, as enunciated by Herbert Spencer and illustrated by the work of Malthus and Darwin; sexual repression being here regarded as the result of a conflict which constitutes the psychic aspect of this antagonism.

II. Spencer's two *a priori* arguments for the existence of the antagonism between Individuation and Genesis are briefly recapitulated and considered.

- (1) The (biological) conditions of racial existence necessitate an inverse correspondence between Individuation and Genesis (the more developed species being less prolific), since any other state of affairs entails either the extinction of the race or a return to the inverse correspondence.
- (2) The (physiological) conditions of individual existence necessitate this inverse correspondence, since the matter and energy devoted to reproductive ends are inevitably withdrawn from the (limited) quantity of matter and energy available for the use of the individual.

Both these arguments are shown to apply to the human race.

III. The relative amount of matter and energy devoted to Individuation or to Genesis is (within the limits imposed by individual modifiability and racial variability) determined by Natural Selection, which has on the whole favoured an increase of Individuation at the cost of a decrease of Genesis. There have however been certain factors which have retarded this process. Among these are to be found the tendency for the advantages obtained by a higher degree of Individuation to be cancelled by:—

- (1) a subsequent higher rate of reproduction due to easier conditions of life;
- (2) a less strict elimination of the unfit (who are in this case also the more prolific);

- (3) a general diminution of vital energy;
- (4) the direction of vital energy to ends which are of little or no immediate biological advantage (*e.g.* in the human race, play, art, science and, generally, the desire for luxuries).

For these reasons the more prolific races or individuals who are content with a relatively simple life may often supersede the more cultured but less prolific races or individuals.

IV. On the psychological side, the sexual (and parental) instincts correspond to Genesis and the sublimations of these correspond to Individuation. The latter represent (phylogenetically and ontogenetically) more recent acquirements, the former being more deeply ingrained in human character. There exists at present a 'disharmony' in this respect, the human reproductive tendencies and capacities being greater than is biologically advantageous.

The relations between sexuality and sublimation are, however, complex in nature, since the sexual tendencies constitute a necessary foundation for sublimation, both in the early stages of development and (probably to some extent) throughout life. A relatively high level of sexual function is also rendered necessary:—

- (1) by the actual need for reproduction,
- (2) by the relatively slow physiological and psychological adaptability of the organism, which limits the possibilities of sublimation,
- (3) by the correlation between sexual development and general development, healthy sexual function being necessary for the health of the organism as a whole.

Three further points are then considered:

- (1) The antagonism between Individuation and Genesis entails the repression of the non-reproductive partial (sex) impulses;
  - (a) because they interfere with work (sublimation);
  - (b) because they reinforce the directly reproductive trends.
 But the difficulties consequent on over-reproduction do entail in some respects an increased function of the non-reproductive partial impulses, leading to an increase of perversions etc.
- (2) In the human race the higher stages of Individuation are closely connected with the process of Socialisation, so that the forces of repression often seem to emanate from the 'herd instinct.'
- (3) A certain element of inhibition has become an integral part of the human sexual instinct itself;

- (a) because the powerful sexual inhibitions and restraints can only be overcome, slowly and gradually;
- (b) because the accumulation of tension resulting from these inhibitions serves to produce greater eventual gratification.

V. A due realisation of the nature and significance of the sexual inhibitions (together with their biological and economic foundations) has been prevented by a number of psychological factors, the study of which is of great importance for social psychology. Among these factors are:

- (1) An unwillingness (derived from the Narcissistic tendencies) to recognise that the human race is still subject to biological laws operative in the case of other living beings.
- (2) The idea (due ultimately to displacements of parent-love and of infantile 'omnipotence of thought') that God or Nature will provide amply for all possible human needs.
- (3) The tendency (fostered by Natural Selection in the past) to regard any shortage of the necessities of existence as due to the hostile actions of our fellow men. This tendency is reinforced by the economic complexities and inequalities of modern civilisation and also by a displacement of the hostile parent-regarding feelings.
- (4) The repression of hostile feelings, due to socialisation, leads to a failure to recognise the causes of hostility (between individuals, classes, nations or races) inherent in the pressure of population on the means of subsistence. Malthusianism is also unwelcome;
  - (a) because it reduces the outlets for our philanthropic tendencies;
  - (b) because it tends to serve as an expression of child-hatred on the part of parents—contraception being regarded as equivalent to abortion or infanticide.
- (5) The confidence in large numbers which has been fostered by our past history and which is sometimes reinforced by a (Narcissistic) identification of Self and Country.
- (6) Unwillingness to realise the necessity for the (unpleasant) inhibition of the sexual tendencies. Connected with this are:
  - (6A) The primitive identification of the fertility of human beings with the fertility of animals and plants that serve for food.



- (6B) The Narcissistic over-emphasis of the sexual function. This (when projected on to the community) leads to a desire for a high birth rate.
- (6C) The fear that Malthusianism may lead to the extinction of the individual family (this fear being largely due to a Narcissistic identification of the Self with the family).
- (7) An unwillingness to contemplate any divorce between Sexuality and Reproduction—this being chiefly due to the fear of removing the 'natural' obstacles to sexual pleasure.

VI. A full recognition of the view here advocated (together with the implied recognition of Malthusian principles) may therefore be very long delayed; but there are reasons why it should not be indefinitely postponed. But even if recognised, appropriate action may still be delayed owing to various difficulties, *e.g.* (*a*) the question of how the relative fertility of various classes and nations is to be controlled (especially in the case of culturally inferior nations and classes), (*b*) the fear of sexual pleasure and of general mental stagnation consequent upon easier conditions of life.

But if, in spite of these difficulties, the struggle for existence is abolished as a result of adequate birth control, we may expect that a freer attitude towards sexual problems and sexual desires will result. The two aspects of the antagonism between Individuation and Genesis will however affect sexual inhibition differently. The inhibitions due to over-reproduction will be entirely removed, but the need for sublimation will remain and will continue to necessitate a considerable degree of sexual inhibition; the actual intensity of the inhibition from this source depending on a number of factors—biological, psychological and ethical in nature.

## SOME PROPERTIES OF COMPLEX INDICATORS.

By W. WHATELY SMITH.

THE word-association test has already proved of great value in enabling us to work out the differences between various mental conditions, and there is no reason to suppose that the limit of its usefulness has yet been reached. I believe, on the contrary, that it is capable of considerable further development, and that the use of the psycho-galvanic reflex in conjunction with it is especially calculated to increase its power as a method of research and also, very probably, of diagnosis.

The material obtained from a word-association test consists, first, of the reaction words themselves whose form may throw light on the psychological type to which the subject belongs, and second, of observations on the 'complex-indicators' evoked by the various words. These two divisions overlap to some extent; on the one hand some forms of reaction word are themselves often complex-indicators—repetition of stimulus words, 'stereotypes,' etc.—while, on the other, certain properties of the complex-indicators may be relevant to the question of psychological type, *e.g.* the ratio of the arithmetic mean to the probable mean of the reaction time.

Each of these groups of data is amenable to mathematical treatment, and it is just this possibility of applying a purely objective and quantitative process of analysis to the content of the individual mind that makes the method so uniquely valuable.

The precision and reliability of the results which it yields must necessarily depend on the accuracy with which we interpret the indications which it affords; it follows that the more thoroughly we understand the properties of complex-indicators and the relations between them, the more satisfactorily shall we be able to analyse any mental condition to which we apply the method.

Many complex-indicators have been noted; the more important are: prolongation of reaction time, disturbance of reproduction in the 'reproduction test,' too-large psycho-galvanic reflex, reaction with two or more words when the subject usually reacts with one word, repetition of the stimulus-word, misunderstanding of the stimulus-word, faults, slips of speech, translation into a foreign language, reaction with an otherwise unusual foreign word, interpolation of 'Yes' or some other exclamation

before or after the reaction, unusual content of the reaction, perseveration in essence and in form<sup>1</sup>.

I am here concerned only with the first three of these, viz.:

- (i) Reaction Time.
- (ii) The Galvanometer Deflection of the psycho-galvanic reflex.
- (iii) Disturbances in the reproduction test.

*Note.*—All reaction times were measured, and are given, in fifths of seconds.

Of these the first has received by far the greatest attention; the only work with which I am acquainted on the use of the psycho-galvanic reflex as a complex-indicator is that of Binswanger<sup>2</sup>; and some experiments on the "B. C. A." case by Prince and Petersen<sup>3</sup>. Even the reproduction test has not gained the recognition it deserves—I shall give below reasons for believing it to be one of the most reliable of complex-indicators.

In the course of the discussion I shall use freely the terms 'positive affective tone' and 'negative affective tone' which I introduced in the course of a paper on "Memory and Affective Tone" which appeared in the General Section of the *British Journal of Psychology* for January 1921. Positive affective tone is defined as that variety of tone which tends to attract attention or to promote the accession to consciousness of those 'ideas' or presentations whose presence therein it accompanies, while negative tone is the variety possessed of the opposite properties<sup>4</sup>. For the sake of brevity I shall speak of 'positively toned words,' meaning stimulus words such that the ideas evoked by them are accompanied by positive tone when present in consciousness, and of 'negatively toned words' in a similar sense.

I have shown in the paper cited above that the remembering of a list of words learned is markedly influenced by the affective tone of the words and, further, that the affective tone may tend either to promote or to impede memory and must therefore be of two opposite kinds which I have termed 'positive' and 'negative' respectively. I now propose to assume this as established and to use the 'memory value' of the stimulus word of a reaction as a guide to the affective quality of that reaction.

At this point I must guard against the possible criticism that I am

<sup>1</sup> Jung, *Studies in Word Association*, p. 405.

<sup>2</sup> *Loc. cit.* pp. 446-530.

<sup>3</sup> *Journal of Abnormal Psychology*, 1908.

<sup>4</sup> In general 'positive' will correspond to 'pleasant' tone, and 'negative' to unpleasant, but this correspondence is not necessarily invariable.

arguing in a circle, as who should premise *A* in order to deduce *B* and then premise *B* in order to deduce *A*. Such a criticism would be unjustified. My only assumption with regard to my work on memory was that the complex-indicators concerned did, in general, indicate affective tone—an assumption which, I imagine, no one would wish to dispute. I then showed experimentally that memory is influenced by affective tone and that two varieties of the latter must be postulated in order to account for the effects observed: these conclusions, again, are entirely in harmony with general psychological knowledge. I also found that somewhat different, albeit congruent, results were obtained according to the complex-indicator used to detect and measure the tone.

I now assume:

- (i) That complex-indicators show affective tone.
- (ii) That memory is influenced by the latter.
- (iii) That there are two opposite varieties of tone.

Of these (i) was the initial assumption while (ii) and (iii) are not only acceptable on general grounds but also necessary deductions from my experimental results.

I now propose to investigate the differences between complex-indicators, not to prove their common quality of indicating affective tone.

The first point to which I wish to draw attention is the fact that positive affective tone is as 'real' a thing as negative tone. So far as I am aware this is a matter which has been wholly overlooked by all who have worked with the association test. The reason is obvious enough; this branch of psychological research has always been closely connected with psychopathology, and those who have studied it have approached it from an essentially pathological standpoint. Now, in psychopathology the negatively toned<sup>1</sup>, conflict-producing complex is all important; this, the true 'complex,' is the *fons et origo mali* in pathological conditions and it is this, therefore, which the psychopathologist is anxious to identify and eradicate<sup>2</sup>. Positively toned constellations do

<sup>1</sup> N.B. 'Negative' tone is, by definition, the kind of tone which tends to drive ideas from consciousness, *i.e.* to lead to their 'repression.'

<sup>2</sup> It is rash, perhaps, to suggest the addition of yet another term to the already so difficult vocabulary of psychology, but I think that the word 'Eridogenic,' meaning conflict-producing, might sometimes be useful in this connection. Some authorities use the word 'complex' in a purely pathological sense, others as synonymous with 'constellation' and to denote *any* relatively stable group of ideas. (Cf. Bernard Hart, *The Psychology of Insanity*.) The trend of general usage seems to be in the direction of the former practice and this will doubtless become universal in due course. Meanwhile the qualifying adjective 'eridogenic,' which perfectly suggests the essential features of the repressed complex, might advantageously be used in cases of doubt.



not interest him and he has not considered the possibility of detecting them. Their existence ought not, however, to be ignored by the psychologist who is concerned with the general theory of mental activity. In studying the changes in mental content corresponding to different conditions it would clearly be unwise to ignore any opportunity of identifying as many elements, or kinds of elements, as possible, and if it can be shown that positively toned constellations and not 'complexes' only can be detected by suitable means, this fact is likely to be of value.

In the paper referred to above I gave some reason for supposing that the psycho-galvanic reflex shows positive affective tone as well as negative, and that disturbances in the reproduction test were predominantly indicative of negative tone; prolongation of reaction time I surmised to be a less definite indicator than either of the others—but to be, on the whole, more indicative of negative than of positive tone.

These opinions were based on the general form of the curves connecting Memory with intensity of affective tone as measured by the indicators concerned; I have since succeeded in bringing out the points in question more clearly by another method.

The material used is that gathered in the course of the experiments on memory. Of the 50 subjects then examined 22 performed the reproduction test; of these I exclude one whose reaction times were not recorded and three who failed to complete the memory part of the experiment. We are thus left with 18 subjects with regard to whom observations were made on all three complex-indicators and who also completed the memory test.

Any reaction given by one of these subjects might be accompanied by any one of the following eight arrangements of complex-indicators:

(i)	None	...	...	...	...	...	...	...	...	Call this class	'O'
(ii)	A 'too-long' reaction time only	...	...	...	...	...	...	...	...	" "	'T'
(iii)	A 'too-large' galvanometer deflection only	...	...	...	...	...	...	...	...	" "	'G'
(iv)	Disturbance in reproduction only	...	...	...	...	...	...	...	...	" "	'R'
(v)	A 'too-long' time coupled with a 'too-large' deflection	...	...	...	...	...	...	...	...	" "	'TG'
(vi)	A 'too-long' time coupled with a disturbance in reproduction	...	...	...	...	...	...	...	...	" "	'TR'
(vii)	A 'too-large' deflection coupled with a disturbance in reproduction	...	...	...	...	...	...	...	...	" "	'GR'
(viii)	All three of these	...	...	...	...	...	...	...	...	" "	'TGR'

(*Note.*—By 'too-long' time or 'too-large' deflection I mean a time or deflection larger than the Probable Mean, which is that value of the variate above and below which variates are equally numerous; it is also known as the 'median.' Under the heading of 'disturbance in repro-

duction' I include (i) complete failure to remember the original reaction word, (ii) substitution of a different word, and (iii) prolonged hesitation in giving the reproduction.)

I next divided the 518 words learned by the 18 subjects into these eight classes and calculated the mean memory value<sup>1</sup> for each class. The results are given in Table I.

Table I.

Indicator class	No. of words in class	Mean Memory value	Rank	Classes in order of Memory value	Mean Memory value
O	138	6.7	3	G	7.4
T	60	6.7	3	TG	7.2
G	83	7.4	1	O	6.7
R	38	5.7	8	T	6.7
TG	89	7.2	2	GR	6.6
TR	29	6.0	6	TR	6.0
GR	36	6.6	5	TGR	6.0
TGR	45	6.0	6	R	5.7

Mean memory value for all reactions analysed: 6.70.

It must be remembered that the memory value is only a rough test of whether the affective tone evoked by a given word is positive or negative; there is a marked tendency for negatively toned words to drop out early and consequently to show a low memory value, and conversely; but there are innumerable fortuitous and external causes which may interfere with this and cause a word to be remembered or forgotten for reasons quite other than its intrinsic merits. In spite of this the main indications of the table are quite unmistakable and distinctly striking.

First I would call attention to the fact that the one complex-indicator whose presence is uniformly unfavourable to memory, *i.e.* which uniformly indicates negative tone, is disturbance in the reproduction test. The four classes in which this indicator figures are the last four on the list as regards memory value.

If we treat these results somewhat after the fashion of a team-race, giving one mark for presence in the class occupying the first position, two for the second, and so on, the indicator getting the most marks will be that which is most closely associated with the presence of the variety of affective tone which tends to impede memory, with negative tone to wit, and conversely. The marks thus gained are:

<sup>1</sup> The 'memory value' may range from 0, for words never remembered, to 10 for words remembered without difficulty on each of five occasions. Cf. *loc. cit.* pp. 241-242.

'Too-large' galvanometer deflection	15
'Too-long' reaction time	18.5
Disturbance in reproduction	26.5

I conclude therefore that this last phenomenon is not only *a* complex-indicator—and even this has been questioned<sup>1</sup>—but *the* complex-indicator *par excellence*<sup>2</sup>.

The appearance of class R (disturbances in reproduction only) at the bottom of the list requires some explanation; one would expect this position to be occupied by class TGR on the ground that the more indicators are present the more intense the affective tone is likely to be. The discrepancy may be due to the large influence on this rather small class of one subject (No. 18) whose learned words included seven characterised by disturbance of reproduction only and scored a total memory value of only 24. This may represent some abnormality on the part of this subject whom, indeed, I rather suspect on other grounds. If these reactions are eliminated from the class its mean memory value rises to 6.3 and the order then becomes:

Table II.

Rank	Indicator class	Mean Memory value
1	G	7.4
2	TG	7.2
3	O	6.7
4	T	6.7
5	GR	6.6
6	R	6.3
7	TR	6.0
8	TGR	6.0

I, personally, regard this order as more correct than the first, but this is a detail of small importance.

The next point to be noted is that class T shows precisely the same mean memory value as class O. That is to say: Prolongation of reaction time alone is not necessarily a complex-indicator; it is only significant if accompanied by other indicators. This is not at all contrary to accepted views; it is commonly recognised that reaction time may sometimes be prolonged on account of purely 'intellectual' difficulties, arising from the rarity of the stimulus word, etc., without the prolongation being due to a complex.

<sup>1</sup> Cf. Jung, *loc. cit.* p. 396.

<sup>2</sup> Using 'complex' in its common pathological sense and not as synonymous with 'constellation.'

I suspect, however, that this matter is not quite so simple as it might appear at first sight. It will be noticed that the mean memory value of the class TG is markedly above that for class O or for all classes: classes containing 'T' have a memory value below this only when they also contain 'R.' The obvious conclusion is that prolongation of reaction time is a sign of negative affective tone, *i.e.* a complex-indicator, only when accompanied by disturbance in reproduction. I do not think that this conclusion is sufficiently in conformity with general experience of reaction time as a complex-indicator to pass unchallenged, even if we remember, as we should, that we are here dealing with general tendencies rather than with rigid rules. No one would suggest, of course, that every prolongation of reaction time, however small, is necessarily a complex-indicator, for it is universally recognised that only the more salient prolongations are significant. But on the other hand I doubt whether any psycho-therapist accustomed to work with the association test would be willing to admit that all cases in which a significantly too-long time is not accompanied by a disturbance in reproduction are to be regarded as accidental lapses from a general rule. That there is a strong tendency for significant prolongations of reaction time to be accompanied by disturbances in reproduction has, it is true, been shown by Jung<sup>1</sup>; but it should be conceded, in my judgment, that prolongation of reaction time alone may on occasion be a true complex-indicator, quite apart from the presence, or merely accidental absence, of disturbance in reproduction. If this be correct we should expect to find the mean memory value of class T somewhat below that for class O and it is necessary to account for the fact that it is not.

I think the explanation is that the class T really consists of three sub-classes, namely:

- (i) Genuinely 'indifferent' words evoking no appreciable affective tone either positive or negative; these would fall in class O were it not for the fact that their reaction time is prolonged for reasons of intellectual difficulty and the like. Their mean memory value would be 6.7.
- (ii) Negatively toned words whose prolonged reaction time is significant, possibly accompanied by some of the miscellaneous complex-indicators enumerated on page 247. If these could be separated out from the remainder their mean memory value would presumably be less than 6.7.

<sup>1</sup> *Loc. cit.* pp. 396, 899.



- (iii) Positively toned words, which through lack of intensity or for other reasons do not produce a too-large galvanometer deflection, but whose reaction time is delayed for the same 'intellectual' reasons as are operative in sub-class (i). These words will have a mean memory value greater than that of the indifferent words and will thus counteract the effect of the words in sub-class (ii).

In spite of this I am strongly of opinion that the statement at the beginning of this section is in general true, that prolongation of reaction time is not likely to be significant unless accompanied by other indicators, and that the proportion of words belonging to sub-classes (ii) and (iii) is small.

It is also probable that some positively toned words may be accompanied by too-long times for the following reasons:

- (a) When a word which evokes markedly agreeable associations, which will as a rule be positively toned, is called out to a subject it seems very possible that his reaction time may be prolonged simply on account of the number of equally acceptable images which crowd in upon him; he suffers, in fact, from an *embarras de richesses*.
- (b) In such circumstances there will also be a tendency for his attention to be diverted from the experiment and to dwell on the pleasing ideas conjured up; this momentary inattention may prolong the reaction time.
- (c) The subject may not wish to reply with the first word which occurs to him although it may be intensely positive to him and in no way connected with a complex. For example: the stimulus word 'woman' would be very likely to evoke the image of the subject's *fiancée*, an image which we may suppose to be accompanied by strong and definitely positive affective tone. The first word to occur to him would naturally be her name; but he might not care to give this as a reaction word in the presence of the experimenter. This would delay the reaction time in spite of the positive tone accompanying the word but it would be ridiculous to suggest that such a prolongation of the time should be considered as a complex-indicator.

This agrees with the form of the curve which I obtained in the course of my memory experiments connecting reaction time with memory value. I found that the mean reaction time for the words least well remembered was greater than that for words better remembered and that there was

a slight tendency for the time to be prolonged in the case of the best-remembered (*i.e.* most positively toned) words.

In view of the foregoing considerations we may regard the position of class T as quite natural.

Perhaps the most important feature of these results is the position of class G at the head of the list. It is closely followed by class TG, and the fact that each of these classes has a mean memory value handsomely in excess of that for class O (no complex-indicators) proves that they consist mainly of positively toned words. This amply confirms my view that the psycho-galvanic reflex detects and measures positive affective tone as well as negative, and shows further that it does so in circumstances—those prevailing with regard to words in class G, to wit—in which other indicators do not.

Class G, in fact, consists mainly of words of comparatively intense positive tone, unaccompanied by prolongation of time or disturbance in reproduction; if the galvanometer had not been used there would have been nothing to distinguish them from indifferent words in class O. In these circumstances O and G, T and TG, R and GR, TR and TGR would have been combined and the results would have been:

Table III.

Class	Composition	No. in class	Mean memory value
O	O + G	221	7.0
T	T + TG	149	7.0
R	R + GR	74	6.2
TR	TR + TGR	74	6.0

Here again the dominance of disturbances in reproduction as indicators of negative tone is very noticeable, as also is the non-significance of too-long times unaccompanied by other signs.

The superior resolving-power, so to speak, which is gained by the method when the galvanometer is used is obvious if we compare these last results with those given in Table I.

The high memory value of class TG is readily accounted for by, and constitutes a powerful vindication of the suggestions put forward on page 254 above. The class consists of words accompanied by strong positive tone whose reaction time is prolonged for one of the reasons there enumerated.

It seems reasonable to suppose that the influence of positively toned words on the reaction time will be approximately proportional to the intensity of their tone; or, at any rate, that prolongation of the time will occur with more intensely, rather than with less intensely toned

words. We should therefore expect that the mean intensity of tone in class TG would be greater than in class G and, inasmuch as this tone is positive, that the mean memory value would also be greater.

The former is the case as will be seen later. That the latter is not may, I think, be explained as follows: complex-indicators, other than those here analysed, are rare in my material, but no fewer than nine are to be found in class TG; the mean memory value of these is 5.2 and if they are eliminated from the class the mean memory value of the remainder is 7.4 which raises it to the position of equal first with class G. (Actually, if we take the mean to another place of decimals we have—mean for class TG = 7.425, mean for class G = 7.41.)

Whether this alteration is legitimate is a matter of opinion into which subjective factors enter largely. I, personally, think that it is, and I am strengthened in this view by considerations of the relative intensity of the tone in different classes as shown by the mean magnitude of the complex-indicators.

Since the Probable Means of the reaction times and galvanometer deflections vary considerably in different subjects it might be unwise simply to calculate the arithmetic means of the times and deviations in the different classes and to use these as measures of the intensity of affective tone; to do so would involve a danger of the classes being dominated by a few subjects whose probable means are unusually high. I prefer to express each value as a percentage of the corresponding Probable Mean and to use the mean of these percentages as the measure of intensity; I think this plan might profitably be adopted in all similar work which may need to be compared with results obtained by other experimenters. It is equivalent to reducing all subjects to terms of a 'standard subject' whose Probable Mean is 100 units.

In this particular case it makes no difference which method we use. The results obtained by both are shown below:

Table IV.

Indicator Class	Mean percentage of P.M.		Arithmetic Mean	
	RT	GD	RT	GD
TG	151	269	17.4	17.5
G	—	246	—	15.5
T	130	—	13.4	—
O	—	—	—	—
GR	—	235	—	13.9
TR	132	—	13.3	—
TGR	170	242	17.5	14.0
R	—	—	—	—

This shows that class TG is more intensely toned than either of classes T or G, and class TGR than either TR or GR; this applies both to reaction time and galvanometer deflection; which is just what we should expect. The discrepancy between the percentage of the Probable Mean and the Arithmetic Mean in the case of the reaction time in classes T and TR is negligible.

It is possible to apply a further check to the results. If the words learned form a reasonably representative sample of the whole of the material available there ought to be some degree of correspondence between the mean values of the reaction time and the galvanometer deflection, in the various classes, when calculated from all the reactions, and the values yielded by the learned words only. The correspondence will not be quantitatively exact because in the case of my first 25 subjects, of whom 15 are included in the 18 here concerned, I selected to be learned the 15 words giving the largest galvanometer deflection and the 15 giving the smallest. This was done with the idea of giving affective tone the best possible chance of exhibiting any influence on memory which it might have, and this circumstance affects the quantitative relations between the 'sample' and the remainder of the material in a somewhat complicated way.

The comparatively large number of data here available makes it unnecessary to use the percentage method. The values of the arithmetic means for the whole material are:

Table V.

Indicator				
Class	No. in class	A.M. of R.T.	A.M. of G.D.	Proportions
TG	239	15.6	14.5	Positively toned 31.4 %
G	307	—	12.4	
T	255	14.6	—	Neutral 42.2 %
O	480	—	—	
GR	105	—	11.2	Negatively toned 26.4 %
TR	119	13.9	—	
TGR	107	16.8	11.7	
R	129	—	—	

The correspondence between these values and those given in the preceding table is obviously very close.

I have entered into these details because I want to show how very concordant the results are and how those obtained by one method of treating the data harmonise with those obtained by another.

When we remember how rough a test of the quality of affective tone the 'memory value' of a word must necessarily be in practice, and how



many accidental causes may distort and obscure its indications, it will be admitted, I believe, that this concordance is remarkable and justifies us in regarding the results as possessed of a high degree of reliability.

A few miscellaneous observations concerning complex-indicators may be noted here.

In the 1741 reactions given by the 18 subjects dealt with above there are 460 disturbances in reproduction; this is equal to 26.9 % as compared with Jung's "33 % not reproduced<sup>1</sup>." It is not clear whether this last figure includes associations reproduced with great hesitation, presumably it does. I attribute the difference between these two values to the fact that among the 28 subjects dealt with by Jung there were 25 nervous and mental patients of different kinds, whereas all my subjects were normal.

Jung found that "on the average, 62.2 % of the absent reproductions lie, as regards the reaction-times, above the probable mean"; I find only 49.2 %. This difference is probably due to the same cause. Abnormal subjects will, in general, possess more numerous and stronger complexes than my normal subjects, and the more intense tone aroused by the complex-striking stimulus words—indicated in both cases by the disturbance of reproduction—will tend to prolong the reaction time more frequently in the case of the abnormal subjects.

In view of the evidence I have brought forward above which shows that disturbance in reproduction is more intimately associated with negative affective tone than are either of the other two complex-indicators discussed, I do not think it is necessary to reproduce from my data the figures analogous to those which Jung gives in favour of regarding this phenomenon as significant. It may be pointed out, however, that even among his so largely abnormal subjects, it is probable that a certain number of reaction times were prolonged on account of positive affective tone aroused by the stimulus word, or on account of intellectual difficulties. If Jung had been able to distinguish between such prolongations and those due to negative tone his figures would, presumably, have borne out his contention even more strongly than they did.

There can be no doubt whatever that for quantitative work the galvanometer deflection is a far more valuable indicator than the reaction time. It is not under voluntary control and is not affected to any appreciable extent by non-significant intellectual factors such as sometimes prolong reaction time. Moreover, the absolute magnitude of

<sup>1</sup> *Loc. cit.* p. 401.

the deflections can, in general, be magnified to any extent desired and read with a corresponding degree of precision.

Still more important is the fact that the magnitude of the galvanometer deflection appears to be approximately proportional to the intensity of the corresponding affective tone, however great the deflection; this is not the case with the reaction time. It is obvious on *a priori* grounds that there must be a point at which prolongation of reaction

Table VI.

Word	Mean R.T.	Word	Mean R.T.	Word	Mean R.T.	Word	Mean R.T.	Word	Mean R.T.
1 Name	18.2	21 Wicked	13.6	41 Choice	12.5	61 Bury	11.5	81 Motor	10.8
2 Friend	17.4	22 Afraid	13.5	42 Woman	12.4	62 Wait	11.5	82 Clean	10.8
3 Despise	17.3	23 Dress	13.4	43 Speak	12.3	63 Water	11.4	83 Rich	10.7
4 Make	15.9	24 Dead	13.4	44 Fight	12.2	64 Hunger	11.4	84 Table	10.6
5 Sad	15.8	25 Love	13.3	45 Swim	12.1	65 Glass	11.4	85 Sing	10.4
6 Proud	15.4	26 Luck	13.1	46 Jump	12.1	66 Travel	11.3	86 White	10.4
7 Home	15.2	27 Long	13.1	47 Cow	12.1	67 Flower	11.3	87 Pencil	10.4
8 Nasty	14.9	28 State	13.1	48 Street	12.0	68 Bed	11.3	88 Old	10.4
9 Marry	14.8	29 Silly	12.9	49 Village	11.8	69 Evil	11.3	89 Bird	10.3
10 Habit	14.7	30 Stalk	12.8	50 Bread	11.8	70 Child	11.2	90 Walk	10.3
11 Pity	14.5	31 Pray	12.8	51 Wound	11.8	71 Frog	11.1	91 Work	10.3
12 Happy	14.5	32 Money	12.8	52 Cold	11.7	72 Ship	11.1	92 Carrot	10.2
13 Angry	14.2	33 War	12.8	53 Salt	11.7	73 Lamp	11.0	93 Chair	10.2
14 Bring	14.2	34 Try	12.8	54 Paper	11.7	74 Blue	10.9	94 Ink	9.9
15 Plum	14.0	35 Bag	12.8	55 Divorce	11.6	75 Box	10.9	95 Book	9.8
16 Dance	13.8	36 Insult	12.8	56 Beat	11.6	76 Pond	10.8	96 Head	9.6
17 Worry	13.7	37 Carry	12.6	57 Big	11.6	77 Tree	10.8	97 Horse	9.6
18 Kiss	13.7	38 Ask	12.5	58 Yellow	11.6	78 Finger	10.8	98 Green	9.4
19 Brother	13.6	39 Sick	12.5	59 Cook	11.5	79 Give	10.8	99 Needle	9.3
20 Family	13.6	40 Wine	12.5	60 Go	11.5	80 Doctor	10.8	100 Shut	9.2

Table VII.

Word	Deflec- tion	Word	Deflec- tion	Word	Deflec- tion	Word	Deflec- tion	Word	Deflec- tion
1 Kiss	72.8	21 Worry	33.0	41 Book	26.1	61 Cold	23.0	81 Bird	19.6
2 Love	59.5	22 Insult	32.5	42 Travel	25.9	62 Long	22.7	82 Bread	19.6
3 Marry	58.5	23 Friend	32.2	43 Sick	25.8	63 Go	22.6	83 Old	19.3
4 Divorce	50.8	24 Head	31.7	44 Bag	25.8	64 Cook	22.3	84 Cow	19.0
5 Name	48.7	25 Angry	31.5	45 Water	25.6	65 Yellow	22.2	85 Bring	19.0
6 Woman	40.3	26 Wine	30.9	46 Home	25.4	66 Chair	21.7	86 Clean	18.8
7 Wound	38.0	27 Luck	30.8	47 Big	25.3	67 Finger	21.5	87 Ink	18.7
8 Dance	37.4	28 Green	30.4	48 Bed	25.2	68 Sad	21.4	88 Shut	18.6
9 Afraid	36.8	29 Ask	30.0	49 Silly	25.2	69 Tree	21.2	89 Table	18.5
10 Proud	36.7	30 Make	29.9	50 Brother	25.2	70 Needle	21.1	90 Work	18.3
11 Habit	36.6	31 Pity	29.7	51 Street	24.9	71 Blue	20.6	91 Carrot	18.2
12 Money	35.6	32 Choice	29.7	52 Beat	24.6	72 Ship	20.5	92 Bury	18.0
13 Fight	35.0	33 Dress	28.5	53 Carry	24.5	73 Motor	20.4	93 Hunger	17.9
14 Child	35.0	34 Wicked	28.4	54 Wait	24.4	74 Frog	20.2	94 White	17.8
15 State	34.8	35 Dead	27.6	55 Speak	24.3	75 Walk	20.1	95 Glass	17.6
16 Despise	34.7	36 Sing	27.6	56 Box	23.9	76 Try	20.0	96 Give	16.7
17 War	34.1	37 Horse	27.1	57 Nasty	23.6	77 Plum	20.0	97 Flower	16.1
18 Family	33.6	38 Evil	27.0	58 Jump	23.5	78 Village	19.9	98 Pond	15.5
19 Happy	33.4	39 Doctor	26.9	59 Paper	23.2	79 Rich	19.9	99 Pencil	15.4
20 Pray	33.1	40 Stalk	26.2	60 Lamp	23.1	80 Salt	19.8	100 Swim	14.2

time ceases to be proportionally significant. No one would suggest, for example, that a time of one minute, say, in a series whose Probable Mean is two seconds, is likely to be the result of an affective state 15 times as intense as that responsible for a time of four seconds. But such considerations cannot be extended to the galvanometer deflections. Table VI shows the 100 words of my list arranged in the order of magnitude of their mean reaction times, calculated for the whole of the 50 subjects examined; Table VII shows the words similarly arranged on a basis of their mean galvanometer deflections.

There can be no doubt that the order of words given by the galvanometer represents their relative affective value far more accurately than that given by the reaction time.

The following points may be noted:

- (i) The highest value in the galvanometer series is 5.12 times as great as the lowest; in the time series it is only 1.98 times as great. The 'resolving power' of the galvanometer is, therefore, rather more than  $2\frac{1}{2}$  times that of the reaction time.
- (ii) In accordance with this we find in the reaction time series seven pairs of words whose mean time is the same, seven such groups of three words each, five of four words each, and two of seven words each. In the galvanometer series there are only eight such pairs and one group of three.  
The galvanometer therefore differentiates gradations of affective tone with much greater delicacy than does the reaction time.
- (iii) The first six words on the galvanometer list are Kiss, Love, Marry, Divorce, Name, Woman. Of these, five are obviously closely connected with sex-life and the other, Name, is probably constellated by the same ideas. These six words stand out head and shoulders above the remainder of the series, as I pointed out in my paper on memory. (N.B. The effect is very noticeable if the series is represented graphically.) Their mean value is 145 % of that of the seventh word and 220 % of that of the Probable Mean of the series.

Compare with these the first six words of the time series, Name<sup>1</sup>, Friend, Despise, Make, Sad, Proud. This is not nearly so homogeneous a group; its mean value is only 110 % of the seventh word and only 141 % of the Probable Mean of the series.

<sup>1</sup> For the probable reason of the very long time for this word, compare page 254. The first name to occur is likely to be that of a wife, *fiancée*, lover or other person of sexual significance to the subject.

This marked difference must be due to some quality, common to all members of the homogeneous group, which the galvanometer picks out better than the reaction time. This can only be a common high affective value.

A further indication of the comparative untrustworthiness of the reaction time as a quantitative indicator is afforded by the fact that the coefficient of correlation between the mean galvanometer deflection and mean reaction time for the series of words is *increased* if we reduce the excessively long times.

The coefficient of correlation for the two series as they stand is + .470. If we eliminate all reaction times more than 100 % greater than the arithmetic mean time of the subject concerned, and substitute for each a value equal to the arithmetic mean plus 100 %, the coefficient of correlation rises to + .488. (Example: The arithmetic mean of the reaction time for subject No. 8 is 10.5, his reaction time for reaction 84 is 24; I substitute 21, that is to say 100 % more than the arithmetic mean, for this value when computing the mean time for reaction 84—stimulus word 'Afraid'—for the purposes of the new correlation.)

This proves that 'much-too-long' times are not significant in proportion to their length; for these two series only correlate in so far as the magnitudes of both are due to a common cause, intensity of affective tone, to wit; it follows that any systematic alteration to one series which increases the coefficient of correlation does so by making it conform more closely to the variations in the working of the common cause.

It would be possible on these lines to determine at what point, in general, continued prolongation of reaction time ceases to be significant; but this would take us very far and is not a point of sufficient interest to be worth investigating.

#### SUMMARY.

(i) *There are two quite definite, distinct and opposite varieties of affective tone*, which may conveniently be called 'positive' and 'negative'; of these the former tends to promote the accession to consciousness of the ideas to which it is concomitant, or the incidence of attention upon them, while the latter produces the opposite effect.

(ii) *Prolongation of reaction time alone is not a reliable complex-indicator*. In a large number of cases (the whole of class TG mentioned above and part of class T) it is due to positive affective tone.

(iii) *Disturbance in reproduction is by far the best complex-indicator—*



or, at least, the most reliable indication of negative tone; I personally regard these two expressions as synonymous.

(iv) *The galvanometer detects positive tone as well as negative and in many cases (the whole of class G) does so when the reaction time does not.*

(v) *Intensity of affective tone, whether positive or negative, increases both reaction time and galvanometer deflection.* In general the most positively toned words are those with too-long times and too-large deflections; next come those with too-large deflections only. Words with no complex-indicators, or with too-long times only, are mostly indifferent. Words with disturbance in the reproduction are almost invariably negatively toned. Words having too-long times *and* too-large deflections are, on the whole, more intensely toned, whether positively or negatively, than those having too-long times *or* too-large deflections only.

(vi) *For quantitative work the galvanometer-deflection of the psychogalvanic reflex is markedly superior to the reaction time.*

(vii) *The 'resolving' power and consequently the scope and utility of the word association method is greatly increased if the galvanometer is used in addition to the reaction time.* The experimenter can divide his reactions into eight classes, all possessed of quantitatively and qualitatively distinct attributes, instead of into four only.

(viii) *The memory test enables us to determine the more important relative properties of these classes.* It is a very laborious method and somewhat crude, but the results it yields show a remarkable concordance and it is probable that the conclusions arrived at are reliable.

## THE RELATION BETWEEN COMPLEX INDICATORS AND THE FORM OF THE ASSOCIATION.

BY W. WHATELY SMITH.

IN the preceding paper I investigated the relations which exist between the affective tone aroused by a stimulus word and the 'complex indicators' which accompany the reaction. I did this with regard to three indicators, namely,

- (i) 'too-long' reaction time,
- (ii) 'too-large' psycho-galvanic reflex,
- (iii) disturbance of reproduction in Jung's reproduction test.

I showed that, if we indicate the presence of a 'too-long' time by T, of a 'too-large' reflex by G, of disturbance in reproduction by R, and the absence of any indicator by O, the relation between the affective tone of words and the various classes into which they can be divided according to their indicators is as follows:

Classes G and TG	consist in general of positively toned words.
„ O and T	„ „ neutrally „ „
„ R, TR, GR and TGR	„ „ negatively „ „

The question now arises as to whether there is any relation between the affective tone of a word and the *form* of the association, *i.e.* by co-ordination, co-existence, predicate, etc.

Sundry attempts have been made by various workers to investigate this point by determining the mean reaction time of the different classes of association, but without leading to any very uniform or satisfactory results. This is not surprising for, as I have shown, prolongation of reaction time *alone* is likely to be a very unsatisfactory and misleading guide; it may be prolonged on account of negative tone, of comparatively intense positive tone, or of purely intellectual factors which have nothing to do with affective tone at all. It is necessary to discriminate between positively, neutrally and negatively toned words before we can hope to throw any helpful light on the question. I have attempted to do so in this paper.

I wholly agree with Jung's statement that "Everyone who does

practical work in association has found the classification of the results the hardest and most tedious part." Many schemes have been devised, none are wholly satisfactory. If the system used is very elaborate and refined the results are likely to be unduly influenced by subjective factors and an immense mass of material is needed in order to give a reasonably large number of data in the rarer sub-classes; if it is too coarse we are liable to miss interesting points which a more detailed analysis might have brought to light. The additional labour entailed by the use of a very elaborate system also greatly reduces its practical value.

I therefore feel it necessary to give some account of the system which I have adopted and of the principles which have guided me in applying it.

I may observe in passing that the first and most important principle which should be remembered throughout all work of this kind is that the classification should be in accordance with the workings of the *subject's* mind and not the experimenter's. A rigidly formal system based on purely logical or grammatical considerations is likely to ignore just those idiosyncrasies which we wish to study, and so to prove of little value. I shall discuss this question of the proper basis for classification in more detail at a later stage.

The system which I finally adopted, after a few preliminary trials, is based on that given by Jung<sup>1</sup>.

The primary division is between 'inner' and 'outer' associations. The criterion which I have tried to bear in mind in distinguishing between the two is perhaps best expressed by saying that in the case of 'outer' associations the connection between the ideas in the subject's mind has been formed for him, so to speak as a result of objective experience, whereas 'inner' associations are a result of what I may term the 'digestion' of experiences by the mind itself.

For example, the associations Cow—field, or Wine—bottle, are outer associations; one is accustomed to observe cows in fields and wine in bottles, such associations are given ready-made, so to speak, and do not demand any subjective mental work for their formation. The same applies to verbal associations such as Long—short, Black—white, which are constantly 'given' in conjunction. On the other hand such associations as Cow—animal, Frog—nasty, Child—nice, are to some extent dependent upon processes of analysis, synthesis, systematisation and so forth in our minds. This last idea can be clearly recognised in Jung's classification of associations by co-ordination into:

<sup>1</sup> *Studies in Word Association*, pp. 13-38.

- (i) Coadjunction, (a) By a common supraconcept.  
                           (b) By similarity.  
                           (c) By inner relationship.  
                           (d) By outer relationship.
- (ii) Subordination.
- (iii) Supraordination.
- (iv) Contrast (other than habitual verbal contrasts).
- (v) Co-ordination of undetermined quality.

This principle is, I think, reasonably unambiguous and on *a priori* grounds seems the kind of distinction which is likely to prove helpful.

Its application presents certain difficulties, however, when we come to the consideration of the predicate type of association. Jung classes all varieties of predicate reaction together as inner associations, but I have grave doubts as to whether this is either legitimate or profitable.

I quite agree that predicates containing an element of personal opinion should be so regarded. But it seems to me that such reactions as Wine—red, Water—wet, Tree—green, which I may term ‘simple’ predicates, are just as much ‘outer’ associations as Wine—bottle, Water—pond, Tree—wood. They are equally ‘given ready-made’ as a part of objective experience and are equally lacking in any product of subjective mental activity. Similar considerations also apply in some measure to very many cases of ‘subject relationships’ and ‘object relationships,’ *e.g.* Jump—horse, Swim—fish, Make—bread. There are, however, certain border-line cases, such as Speak—explicitly, which are difficult to deal with as they clearly contain a strong personal or truly subjective element. I shall return to this point later, but for the present I conform to Jung’s arrangement.

Before proceeding to describe and exemplify the system I have used, I ought to say that I have throughout treated reactions as reversible. That is to say, I have not discriminated between the stimulus and reaction words; Tree—green, for example, has been treated just the same as Green—tree, Horse—ride as if it were Ride—horse, and so forth.

The classes into which I finally divided the words were:

#### A. INNER ASSOCIATIONS.

I. *Co-ordination.* This class is substantially identical with that of Jung. It is the vaguest and least satisfactory of the classes and I find a tendency in myself to relegate to it associations which I cannot place with certainty in any other class. But Jung himself allows a certain



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elasticity<sup>1</sup> and I have reduced this tendency to a minimum by omitting altogether from the classification a few words about which I felt real doubt.

I do not feel it necessary to give examples of this class as my divergence from Jung is inappreciable and even so occurs almost exclusively in his last and vaguest sub-class.

II. *Predicates*. I recognise here five sub-classes which are easily distinguishable.

- (a) *Simple predicates*. By this I mean reactions in which the stimulus word is qualified by the reaction word, or *vice versa*, in a way which contains no element of personal opinion or judgment of value. Examples:

Tree — green.	Go — quickly.
Lamp — electric.	Carrot — red.
Swim — fast.	Try — hard.

- (b) *Predicates expressive of personal opinion or judgment of value*.

This class needs no further definition. Examples:

Love — good.	Work — dull.
Kiss — good.	Marry — worse.
Silly — bad.	Chair — useful.
Frog — unpleasant.	Old — beautiful.
Home — useless.	Travel — pleasant.

- (c) *Predicates of 'subject relationship.'* In this class the two associated words refer to some activity of which one is the subject. Examples:

Frog — jump.	Sing — girl.
Horse — run.	Tree — grow.
Bird — fly.	Go — boy.
Carry — horse.	Swim — fish.
Needle — prick.	Jump — horse.

- (d) *Predicates of 'object relationship.'* Here the two words relate to some activity of which one is the object. Examples:

Stalk — deer.	Despise — man.
Wine — drink.	Love — man.
Kiss — me <sup>2</sup> .	Make — bread.
Bring — sheep <sup>2</sup> .	Book — read.
Bury — dead.	Carry — weight.

<sup>1</sup> *Loc. cit.* p. 21.

<sup>2</sup> These are good examples of the border-line cases mentioned above.

(c) *Predicates defining place, time, means, etc.* Examples:

Pray — church.	Walk — promenade.
Sing — King's Chapel.	Fight — fists.
Marry — August.	Go — back.
Beat — stick.	Cook — kitchen.
Travel — abroad.	House — live.

III. *Causal dependence.* This class consists of associations in which one idea is causally dependent on the other or is a common consequence of it; I have extended it to include cases in which the idea expressed by one word may reasonably be regarded as a necessary antecedent to that expressed by the other. Examples:

Ask — reply.	Give — have.
Lamp — light.	Afraid — danger.
Rich — money.	Angry — pain.
Worry — exams.	Marry — child.
Clean — wash.	Sad — lonely.

#### B. OUTER ASSOCIATIONS.

IV. *Co-existence.* Associations which arise from the experience of the ideas concerned in temporal or spatial juxtaposition, including cases in which one word represents a *part* of the other. Examples:

Cow — field.	Head — hair.
Table — chair.	Ink — pen.
Tree — leaves.	Paper — pencil.
Home — father.	Motor — carburettor.

Wine — bottle.

I also include here associations in which one word forms an essential part or concomitant of an activity denoted by the other. Examples:

Pencil — write.	Try — rugger.
Swim — river.	Jump — sports.

Ride — horse.

V. *Paraphrases, Synonyms, etc.* This is a slightly widened version of Jung's 'identity' class. The characteristic feature is that the reaction word does not possess a meaning radically different from that of the stimulus word; substantially the same idea is represented in a slightly altered form. Examples:

Try — endeavour.	Shut — closed.
Beat — strike.	Evil — bad.
Say — speak.	Child — baby.
Worry — trouble.	Village — town.
Happy — pleased.	Street — road.

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VI. *Verbal forms.* I have here recognised three sub-classes.

(a) *Reactions determined by experience of the words as forming part of common expressions and phrases in daily use.* Examples:

Long — short.	Choice — Hobson's.
White — black.	Needle — Cleopatra's.
Walk — run.	Fight — good.
Sing — song.	Name — number <sup>1</sup> .
Plum — apple <sup>1</sup> .	Hunger — thirst.
Shut — open.	Clean — dirty.
Rich — poor.	Silly — fool.
Old — young.	Wine — women.
Big — small.	Insult — injury.

Go — come.

(b) *Word-completion.* A word is added which, with the stimulus word, forms a compound word. Examples:

Wine — merchant.	Ink — stand.
Wool — gathering.	Motor — car.

Green — ever.

(c) *Clangs, rhymes and word-completion by syllables which cannot stand alone.* Examples:

State — estate.	Speak — speech.
Pray — prayer.	Fight — fate.
Habit — habitat.	Dress — undress.
Friend — friendless.	Luck — duck.
Silly — silliness.	Family — families.

### C. OTHER CLASSES.

VII. *'Indirect' associations.* I feel that I may be criticised for making a special class for these associations, contrary to the opinion of some authorities. None the less I believe that it is desirable to do this. By 'indirect' associations I do not mean "that mode of reaction which is only understandable by the assumption of a middle term different from the stimulus—or reaction-word<sup>2</sup>." Or rather I do not mean merely this, although, in a sense, some such reactions may belong to my 'indirect' class.

The principle by which I have been guided in assigning words to this class is this: most associations are readily comprehensible by the experimenter; even although they may not be what he would have given himself or would have expected, he can easily see the kind of connections which result in their formation. There are some, on the other hand, in

<sup>1</sup> From recent experiences in H.M. Forces.

<sup>2</sup> Jung, *loc. cit.* p. 29.

which the reaction word seems utterly unrelated to the stimulus word and not to be accounted for by perseveration of ideas aroused by a preceding reaction. These must result from some past experience *peculiar to the individual subject*.

It is just such associations which on account of their intimate personal origin are likely to be of the very first importance in practical work and it is therefore especially well worth while to ascertain whether they have any characteristic affective properties.

I, personally, have found no difficulty in assigning associations to this class and have, indeed, done so as a rule with considerably more confidence than I have felt in several other instances. I give the following examples:

Frog	— emotion.	Pity	— Blackpool.
Blue	— donkey.	Kiss	— Whitstable <sup>1</sup> .
Frog	— crowd.	Glass	— back.
Make	— rabbit.	Proud	— have.
Sing	— red.	Carrot	— brutal.
Dead	— coat.	Marry	— die.
Long	— badge.	Habit	— send.
Brother	— must.	Ask	— lonely.
Bed	— bury.	White	— experiment.
Sing	— feel.	Wine	— preparation.

It will be seen later that the words in this class are, as a matter of fact, distinguished by marked affective properties. This class should clearly be included under the main heading of 'Inner Associations' but, for the moment, I prefer to keep it separate.

VIII. This is not a wholly separate class. I have counted in it a number of 'freaks' some of which were also allotted to other classes. It includes the most conspicuous examples of class VII; cases when the reaction consists of several words instead of the usual single word; reaction by 'stereotypes,' that is to say the same reaction word repeated many times in the course of the experiment; reaction by interjections, etc., etc.

When I had classified the reactions into these eight classes I counted how many in each class were accompanied by no complex indicator, how many by 'too-long' reaction time only, how many by 'too-large' deflection only, how many by both, and so on. The results are shown in Table I.

<sup>1</sup> This is presumably equally eligible for class II (c), but it is very personal and I prefer to place it here.



Table I.

Indicator class	Inner associations						Outer associations						Total	VII	VIII
	I	II a	II b	II c	II d	II e	III	IV	V	VI a	VI b	VI c			
O	70	69	11	13	42	7	10	74	19	130	10	2	461	4	2
	80	64	21	11	39	11	16	68	29	79	10	6		21	9
T	40	36	5	4	25	11	8	54	24	30	2	7	253	7	3
	14	35	11	6	22	8	9	37	17	43	6	3		13	5
G	46	35	8	11	26	9	14	55	17	59	10	3	301	8	6
	52	42	14	7	25	9	10	45	19	52	7	4		16	6
R	24	14	11	2	8	4	2	14	10	11	3	0	117	14	2
	19	16	5	3	10	4	4	17	7	20	2	2		6	2
TG	52	37	18	1	20	9	11	24	13	25	4	5	227	8	6
	39	31	10	5	20	7	8	34	14	39	5	3		12	5
TR	16	15	6	3	7	4	3	8	7	12	3	0	107	23	8
	19	15	5	3	9	3	4	16	7	18	2	1		6	2
GR	21	10	8	1	7	2	1	6	6	10	4	1	91	14	1
	16	13	4	2	8	3	3	13	6	16	2	1		5	2
TGR	18	13	8	4	6	4	8	11	8	8	1	4	101	8	5
	17	14	5	2	9	3	3	15	6	17	2	1		5	2
Totals	287	229	75	39	141	50	57	246	104	285	37	22	1658	86	33

Table II.

Indicator class	Inner associations						Outer associations						Total	VII	VIII
	I	II a	II b	II c	II d	II e	III	IV	V	VI a	VI b	VI c			
Positively toned (G and TG)	98	72	26	12	46	18	25	79	30	84	14	8	528	16	12
	91	73	24	12	45	16	18	79	33	91	12	7		27	11
Neutral (O and T)	110	105	16	17	67	18	18	128	43	160	12	9	714	11	5
	124	99	32	17	61	22	25	105	46	122	16	9		37	14
Negatively toned (R, GR, TR, TGR)	79	52	33	10	28	14	14	39	31	41	11	5	416	59	16
	71	57	19	10	35	13	14	61	26	71	9	5		22	8
Totals	287	229	75	39	141	50	57	246	104	285	37	22	1658	86	33

In Table I, as in those which follow, the ordinary figures show the actual observed number of reactions; the italic figures show the number, computed to the nearest integer, which we should expect to find if chance only were at work.

This last number is obtained as follows: if we have  $N$  objects of which  $n_1$  belong to class  $p_1$ ,  $n_2$  to class  $p_2$ ,  $n_3$  to class  $p_3$  etc. (so that  $\Sigma n = N$ ) and of which  $m_1$  also belong to class  $q_1$ ,  $m_2$  to class  $q_2$ ,  $m_3$  to class  $q_3$  etc. (so that  $\Sigma m = N$ ), then by the ordinary theory of probability we should expect the number belonging to both class  $p_x$  and  $q_y$  to be

$$\frac{n_x \times m_y}{N}.$$

Thus 287 reactions out of 1658 fall in class I and 301 out of 1658 in class G; we should therefore expect to find that  $\frac{287 \times 301}{1658} = 52$ , very nearly, of the members of class I were also members of class TG.

It will be noticed that although in many cases the agreement between the actual numbers and the 'probable' numbers is very close, there are others in which there is a marked difference; these are the cases in which the connection between affective tone and reaction form shows itself.

In view of the evidence which I brought forward in the preceding paper, I regard it as incontestable that the affective classes G and TG chiefly contain positively toned words, classes O and T mainly indifferent words and classes R, GR, TR and TGR mainly negatively toned words. I do not consider, however, that it is practicable to discriminate further than this at present, or to avail ourselves of the quantitative differences which I gave reason for supposing to exist between the classes which make up these three main groups.

I therefore simplify Table I by classifying the reactions, with regard to their affective tone, into 'positively toned,' 'neutral' and 'negatively toned.' The result is shown in Table II.

The behaviour of the various classes can be more clearly seen here than in the original table. I regard the indications afforded by this table as reliable; in most cases we have a good number of reactions in a class and it must be remembered that the crudity and liability to fortuitous interference which made the memory test, used in the preceding paper, so insensitive a criterion, so to speak, of the quality of affective tone, no longer apply here. Once we have determined the qualitative properties of the different indicator classes we can say with

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considerable assurance that the reactions belonging to them possess those affective properties.

Class I (Co-ordination) shows a slight but distinct tendency towards toned as opposed to neutral reactions; the actual figures (98 and 79) for both positively and negatively toned reactions are greater than those indicated by probability (91 and 71 respectively), while the actual figure for neutral reactions is well below the probable figure (110 to 124).

Class II (Predicates) is worth considering in some detail especially in view of the comments I made about it above.

Sub-class (a), consisting of 'simple' predicates, shows a slight tendency to favour neutral (105 'actual' to 99 'probable'), at the expense of negatively toned reactions (52 'actual' to 57 'probable').

II (b)—predicates implying personal opinions or judgments of value—has a marked excess of negatively toned and a marked deficiency of neutral reactions (33 'actual' to 19 'probable' and 16 'actual' to 32 'probable' respectively).

II (c)—subject relationship—conforms exactly to the probable values.

II (d)—object relationship—like II (a), somewhat favours the neutral reactions at the expense of the negatively toned.

II (e)—definition of time, place, means etc.—is a very small class and its deviations from the probable values appear to me to be insignificant.

In fact II (b) shows a characteristic tendency not found in any other form of predicate reaction. It should be regarded, in my opinion, as essentially an 'inner' association, to which general type its affective properties conform, while II (a) is psychologically indistinguishable from the emphatically 'outer' association of co-existence. II (c) and (d) are less obviously 'outer' but in the majority of cases they conform much more nearly to this group than to 'inner' associations. On the whole I consider that they ought to be classed as 'outer.' II (e) I think should be retained in the 'inner' group.

To insist on such widely differing types of reaction as II (a) and II (b) being kept in the same class simply because they are both grammatical predicates is, surely, mere pedantry.

Class III (Causal dependence) is again rather small; its tendency is to favour the positively toned reactions at the expense of the neutral.

Class IV (Co-existence) is the first of the indisputably 'outer' types. It is a large class and shows an unmistakable tendency towards neutral reactions at the expense of the negatively toned.

Class V (Paraphrases, synonyms, etc.) shows a slight and probably

negligible tendency in favour of negatively toned reactions at the expense of the other two.

Class VI (*a*) (Verbal reactions depending on common phrases, etc.) is again large and shows a very marked tendency towards neutral reactions, mainly achieved at the expense of the negatively toned.

Classes VI (*b*) and (*c*) are exiguous and their divergences from 'probable' values are small. They should probably be included in class VI (*a*).

In Class VII (Indirect reactions) the tendency is unmistakable<sup>1</sup>; there is a great preponderance of negatively toned reactions at the expense of both the positively toned and the neutral, especially the latter.

Class VIII ('Freaks') is very small, but I think that the marked excess of negatively toned reactions (16 'actual' to 8 'probable') is almost certainly significant.

We may now simplify the classification still further and compare the whole of the inner associations with the outer.

Table III.

	Inner associations	Outer associations	Class VII	Totals
Positively toned	297 <i>279</i>	215 <i>224</i>	16 <i>27</i>	528
Neutral ... ..	351 <i>380</i>	352 <i>298</i>	11 <i>37</i>	714
Negatively toned	230 <i>219</i>	127 <i>172</i>	59 <i>22</i>	416
Totals ... ..	878	694	86	1658

It is clear that inner associations contain a marked preponderance of positively and negatively toned reactions and a marked lack of neutral reactions; outer associations favour the neutral reactions chiefly at the expense of the negatively toned.

As I have already observed, I consider that class VII should be included among inner associations. I have kept it distinct up to this point, partly because its type of association is, by definition, somewhat obscure and partly because I wanted to show the tendencies of inner associations without there being any question of their being unduly influenced by the inclusion of reaction forms which might appear of dubious eligibility. When class VII is thus included the figures become:

<sup>1</sup> In this class there are 23 reactions actually observed in the 'indicator' class TR; the 'probable' number is 6. The probability of this discrepancy being due to chance is about  $2.3 \times 10^{-7}$ .



Table IV.

	Inner associations	Outer associations	Totals
Positively toned	313 <i>306</i>	215 <i>224</i>	528
Neutral... ..	362 <i>417</i>	352 <i>298</i>	714
Negatively toned	289 <i>241</i>	127 <i>172</i>	416
Totals ... ..	964	694	1658

Inner associations show the same characteristics as before but more markedly with regard to negatively toned reaction and less so with regard to positively toned.

Finally, I shall assume that my contentions as regards Predicate forms are warranted and shall transfer classes II (*a*), II (*c*) and II (*d*) to the outer associations. The figures then become:

Table V.

	Inner associations	Outer associations	Totals
Positively toned	183 <i>176</i>	345 <i>354</i>	528
Neutral... ..	173 <i>240</i>	541 <sup>1</sup> <i>475</i>	714
Negatively toned	199 <i>139</i>	217 <i>274</i>	416
Totals ... ..	555	1103	1658

This again greatly increases the relative predominance of negatively toned reactions among the inner associations; it slightly reduces the relative differences between actual and probable figures for outer associations of all three kinds—they are, in fact, slightly diluted by the addition of a number of reactions distributed in close accordance with probability.

It may be convenient to keep these predicate classes II (*a*), II (*c*) and II (*d*) with the other predicates for certain purposes, but I think there can be no doubt that if we are considering reactions from the affective point of view, their proper place is with the outer associations. And after all it is the affective tone which we are seeking in all practical applications of association methods; reactions unaccompanied by it are of no great value, they do not lead to significant complexes of pathological importance or even to constellations of theoretical interest.

<sup>1</sup> The chance of this difference between the actual and probable figures being accidental is about one in two million.

*The affectively toned reactions are the important reactions*, especially—for clinical work—those which are negatively toned. If therefore we are desirous of ‘summing up’ a subject in the way which is sometimes attempted by study of the ‘reaction-type,’ it is important that we should adopt the system of classification which will most clearly show the relative number of reactions constellated by ‘complexes’—*i.e.* which are negatively toned—and that we should know which classes are likely to contain the greatest proportion of such reactions.

The best way to do this would be to use all three complex indicators, *viz.*: reaction time, psycho-galvanic reflex and the reproduction test. A complete analysis into the ‘indicator classes’ can then be made. But it may well be that external circumstances may not permit of the application of all, or indeed of any, of these tests. In such a case we have only the *form* of the reactions to fall back on and I think it is clear that the relative proportion of complex-determined reactions will be much more clearly shown if we adopt the system of classification which I have here advocated (*viz.* separation of predicate forms into ‘outer’ and ‘inner’ and the inclusion of all the very indirect and ‘personally’ constellated reactions of my class VII—under the head of ‘inner associations’), than if we adhere to the scheme used by Jung. The proportion of inner associations to outer will then afford some measure of the subject’s ‘complexity’—if I may coin a word to denote possession of complexes.

My figures show that for normal subjects the proportion of inner to outer associations is almost precisely 1 to 2 and any proportion much greater than this is likely to mean a correspondingly large number of negatively-toned, complex-determined reactions and therefore to be significant. The most important classes from this point of view are II (*b*) and VII. Class I is somewhat significant, although much less so, and the figures for class VIII show that ‘freaks’ are very noteworthy.

I do not claim that this method is anything but very rough, only that it is likely to be less misleading than existing methods.

At the risk of prolixity and repetition I wish to emphasise the point of view indicated in the preceding paragraphs. My contention is that no system of classifying reactions can be of any value unless it is based on the nature of the psychical processes which determine those reactions rather than on the verbal or grammatical form which they may take. The different forms are only of interest in so far as they can be correlated with significant psychical conditions of one kind or another; apart from this they are merely academic and sterile.

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But we are beginning to realise with increasing clearness that affective tone is the dominant factor in all mental activity; complexes owe their power and their very existence solely to its operation; its distribution, so to speak, is the all-important determinant of the mental state of the individual. Consequently any sound scheme of classification must, in the last analysis, be based upon the affective tone concomitant to the reactions concerned and affective considerations must over-ride all others of a formal and academic nature.

Before proceeding to the interpretation of these results I wish to enlarge for a moment upon the concept of 'positive' and 'negative' affective tone which I have introduced into these studies. I do not propose to discuss them exhaustively here but I feel that it will be wise to consolidate my position and to guard against possible criticism by recalling the terms in which I defined the words<sup>1</sup>.

It is important that the distinction drawn between the two kinds of affective tone should be a valid distinction and truly relevant to mental processes as they actually occur; also that the criterion chosen for establishing the presence of each kind of tone should be of a nature to effect such a valid discrimination.

It will be remembered that I defined negative tone as that variety which tends to repel attention, or to impede the accession to consciousness of the ideas to which it is concomitant; positive tone was defined as the opposite to this.

I think it will be conceded that the operation of negative tone, so defined, is clearly identical, in nature though not in intensity, with the process commonly known as 'repression.' The operation of positive tone is, of course, simply the reverse of this.

I identified the concomitance of these two varieties of tone as characteristic of certain classes of reaction by measuring quantitatively the effects of their operation; that is to say I actually measured the tendency for the stimulus words of the reactions concerned to have their accession to consciousness impeded—*i.e.* to be 'forgotten.'

Consequently, although I admitted that 'positive' and 'negative' tone might be considered as corresponding in many cases with 'pleasant' and 'unpleasant' respectively, the latter vague and unsatisfactory concepts play no part whatever in the application of my methods which are based solely on an empirical observation of the tendency for certain stimulus words to be driven from consciousness and of others to be attracted thereto.

<sup>1</sup> Cf. "Some Properties of Complex Indicators," p. 281.

I submit that this purely empirical procedure yields results which are strictly relevant to mental processes as actually met with and, notably, to those varieties of them which are particularly studied by psychopathologists.

After this digression we may return to the consideration of the results recorded in Tables I–V.

I may as well say at the outset that I have doubts as to whether the study of ‘reaction types’ based upon any system of classifying reactions is likely to prove of great practical value apart from research work. But Jung and other authorities appear to consider it important and potentially valuable and it may prove to be so for certain purposes—*e.g.* diagnosis—but only in so far as we properly understand the significance of the different forms of reaction.

Inspection of Table II shows that the reaction classes may be divided into two main groups:

- (i) Those which favour ‘toned’ reactions at the expense of ‘untuned.’ The principal numbers of this group are classes I, II (*b*), II (*e*), III, VII and (VIII).
- (ii) Those which favour ‘untuned’ reactions at the expense of ‘toned.’ The chief examples here are II (*a*), II (*d*), IV and VI (*a*).

Class V is rather indeterminate and conforms so closely to the probable figures that I shall not consider it further; classes II (*c*), VI (*b*), and VI (*c*) are too small to afford a reliable basis for discussion.

Of the classes comprising the first group all are incontestably ‘inner’ associations; in the second group classes IV and VI (*a*) are equally undoubtedly ‘outer’ associations and I have given reasons for holding that classes II (*a*) and II (*d*) should also be reckoned as ‘outer.’

All this is in accordance with expectation; outer reactions are obviously of a more superficial type than inner, the stimulus word does not penetrate so deeply into the mind, so to speak, because a suitable reaction is easily found. This is rather a loose way of speaking; it would perhaps be more accurate to say that the subject follows the line of least resistance and gives the reaction which combines the maximum of accessibility with the minimum of negative tone. The more accessible, the more familiar, the more superficial an idea associated with the stimulus word is, the greater the chance of ‘dodging’ negative tone. Or, better, the accessible and familiar associated words are just those which, by virtue of the association having been formed in countless varying contexts, possess no specific tone.

This is well borne out by the figures for the principal classes. The



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most superficial class of all is class VI (*a*), consisting of reactions conditioned by common phrases, antitheses, etc. Such reactions can take place with the minimum of attention to the true 'inwardness' of the stimulus word, they are as nearly as possible purely automatic. The actual number of neutral reactions in this class (160) is 132 % of the probable number (122), while the negatively toned reactions only amount to 58 % of the probable number.

Class IV (Co-existence) is less superficial, the formation of such reactions requires rather more attention although no contemplation of the attributes of the object<sup>1</sup> suggested by the stimulus word is necessary. The corresponding figures to those quoted above are: neutral reactions 122 %, negatively toned reactions 64 %.

Class II (*a*) (Simple Predicates) again demand for their formation somewhat closer attention still to the stimulus word, for the simple predicate is essentially an apprehended and named attribute. The figures here are 105 % and 91 % respectively.

Class II (*d*) does not conform unless it be reckoned more superficial than II (*a*)—which I think would be wrong—but it is so small compared to the other three that this observation is not surprising.

Similarly with the inner reactions we find that the tendency for negative tone to show itself is substantially proportional to the extent to which the reaction is personal and peculiar to the subject, or in other words to the degree of its 'innerness.'

Thus class I (Co-ordination) is comparatively superficial. The corresponding figures are, neutral reactions 89 % of the probable number, negatively toned reactions 111 %.

Class II (*b*) is clearly much more personal, consisting as it does of reactions containing an expression of personal opinion. The figures are 50 % and 174 % respectively.

Class VII is by definition the most intimately personal of all (cf. section 4 (*c*)) and accordingly we find that the figures are 30 % and 268 %.

Class II (*e*) is rather small and not very easy to place: in my judgment it should probably be located between I and II (*b*).

Class VIII is much too small to give reliable figures in this connection; inasmuch as it contains a number of reactions taken from class VII and a few 'stereotypes,' it is highly personal, but is diluted to some extent by polyverbal reactions, which although significant are

<sup>1</sup> N.B. Stimulus words giving rise to co-existence reactions are, of necessity, almost invariably concretes.

not quite so obviously peculiar to the individual subject as are the numbers of class VII; the corresponding figures are 36 % and 200 %.

Thus we find, as we progress from class VI (*a*), the most superficial of all, to class VII the most peculiar, the most personal, the most truly inner, a steady increase in the numbers of negatively toned reactions and a steady decrease in the number of neutrally toned. These figures are shown in Table VI.

Table VI.

Class	Actual number of reactions shown as a percentage of the probable number	
	Neutral	Negatively toned
VI ( <i>a</i> )	132	58
IV	122	64
II ( <i>a</i> )	105	91
I	89	111
II ( <i>e</i> )	82	108
II ( <i>b</i> )	50	174
VIII	30	268

I contend that this alone is sufficient justification for the system of classification which I have adopted and if it be considered with the other evidence I have adduced the soundness of this system will, I think, be unmistakably apparent.

Anyone who has done any practical surveying will know what is meant by 'closing a traverse.' I start, let us say, from point *A*, I take observations and calculate the position of point *B*, thence I work to *C*, from *C* to *D*, from *D* to *E* and finally back again to *A*. If the position of *A* thus computed coincides with its known position from which I started I conclude that the intermediate measurements and calculations have been correctly made; it is an extraordinarily delicate check, as anyone who has tried it will admit.

A somewhat similar check can be applied to the investigations embodied in this paper and the two which preceded it<sup>1</sup>.

I started by showing that affective tone, as detected and measured by certain indicators, exerted an influence on the remembering of the words to which it was concomitant; I next used this fact as a means of differentiation between different combinations of these indicators and for determining their affective properties; finally I applied the results of this process of differentiation to the study of the relation between

<sup>1</sup> "Memory and Affective Tone," This *Journal* (General Section), Jan. 1921, and "Some Properties of Complex Indicators" on p. 281 of this issue of the Medical Section.

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the various types of associations and the affective tone concomitant to them.

If these methods are valid and if the tendency I have found for negatively toned reactions to predominate among inner associations and neutral reactions among outer is a real tendency, we should expect the mean 'memory value' of learned words belonging to the former class to be smaller than that of words belonging to the latter. This would constitute a 'check back' on to my starting point.

I have accordingly computed the mean memory value for inner and outer associations (classified according to the system I have been advocating); the values are 6.37 and 6.86 respectively.

Thus we see that starting from Memory, proceeding to Complex Indicators, working from these to the Forms of Associations and finally back again to Memory, the results are uniformly concordant.

When we remember the many fortuitous causes which conspire to make the memory test insensitive and the considerable scope for error which there is in classifying the forms of associations, this 'closing of the traverse' can, I think, fairly be claimed as remarkably satisfactory evidence of the reliability of the methods used and the validity of the conclusions obtained.

Finally it is necessary to consider the bearing of these conclusions as to the form of association on the practical use of the association test. I have already said that I do not think it is likely to be very great, but it cannot be doubted that the more thoroughly the test is understood by those who use it and the more perfectly the relations between its various features are appreciated, the better the results obtained are likely to be. And I believe that it may well prove a very valuable weapon for purely research purposes.

The test is sometimes used as a preliminary to psycho-analysis; the physician applies it in order to gain some idea of the general mental type of the patient and some guide to his principal complexes. He is essentially on the look out for pointers which shall tell him where he may most profitably begin the detailed exploration of the patient's mind; he wishes to shorten his labours by selecting the most promising *point de départ* for the analysis. It may be doubted whether the method is as yet fully appreciated, but some psycho-analysts value it highly.

The success of the test and the amount of information to be gained from it must necessarily depend to a large extent on the experience of the physician. It is hardly a matter which can be reduced to a rigid formula; the conclusions drawn must rather result from a gradual

process of correlating all kinds of indications given by the test with knowledge as to their import derived from various sources. The ease and certainty with which the physician can sum up his patient must be strictly limited by the extent and accuracy of this knowledge; it is all important that he should know, as precisely as possible, which indications are noteworthy and which are not.

So far as the form of the association goes there can be no doubt, in my opinion, that the most significant characteristic is the degree of idiosyncrasy of the reaction word. Stereotypes and multiverbal reactions (my class VIII) and very indirect, 'personal' associations (class VII) are the most significant of all; then come predicate forms involving an expression of personal opinion or judgment of value. Outer associations, especially those verbal forms constellated by common phrases of everyday life, are quite insignificant, though I think it probable that the true 'clang'—as opposed to the rhyme—is often a complex indicator.

In attempting to ascertain the general tendency for stimulus words to elicit emotionally toned reactions the best guide, so far as the form of associations is concerned, is probably the percentage of inner associations, the word 'inner' being defined as I have advocated above.



## THE PROBLEM OF THE NEURASTHENIC PENSIONER<sup>1</sup>.

BY MILLAIS CULPIN.

THE war neuroses have been discussed freely from all points of view, and although in some respects unanimity of opinion is not attained yet one simple conclusion has emerged—they showed no phenomena that had not been met before in cases occurring under peace conditions. Hitherto the neuroses had occupied a very small part of our professional interest; their number was comparatively small, their etiology was obscure, and their treatment accordingly little understood. The patients were difficult to handle and generally received scant attention: to diagnose a complaint as 'neurotic' led often to perfunctory placebos, to drugs the nastiness of which was presumed to have therapeutic value, or to neglect. Instruction in the subject was almost entirely lacking in the curriculum of the medical student.

This was the state of affairs when thousands of cases appeared in our armies. The subject is better known now, and indeed this branch of Medicine has received a greater stimulus through the war than has any other.

The interest aroused by acute cases during the war diverted attention from the probable results, and few of us expected a large number of men to be disabled by mental symptoms which would persist indefinitely after the war had ceased. Yet that is what is happening, and since factors are involved other than those present during the war it seems opportune to consider the subject of the neurasthenic pensioner.

I use the word *neurasthenic* in the broad sense in which it is commonly and, one may say, officially used. It embraces a heterogeneous group which it is not necessary to classify in clinical terms. In that group are, on the one hand, men with records of long and valuable service, men who have gone through the stress and horror of modern warfare to a degree which perhaps only a few can realise. On the other hand are men whose histories are a record of hospital life varied by periods spent with a unit when they performed no useful work whatever, till they were invalided out of the service with a pensionable disability; and other men who had

<sup>1</sup> Read before the Medical Section of the British Psychological Society, Jan. 26, 1921.

been as great a failure in civil life as they proved to be in the army. Add to these a sprinkling of men with a record of crime both within and without the service, as well as congenital psychopaths of various kinds, and you will understand that the problem of the neurasthenic pensioner—how to deal with him and what will happen to him—is no simple one.

In the recognition of the neuroses and psychoneuroses as existing in large numbers we were behind our French allies, who were already familiar with hysteria as a common disorder in a conscript army, and the ever-growing number of hysterics in our home hospitals escaped notice whilst we were fixing our interest upon shell-shock as a new disorder arising from the use of high explosives.

The writings of Roussy and Lhermitte and of Babinski were the first systematic studies of the functional nervous disorders arising from war conditions, though these writers were limited in their etiological views and seemed little influenced by their compatriot Janet—still less by the teachings of psycho-analysis. We may congratulate ourselves that in the understanding of the psychological processes involved in the production and maintenance of symptoms we are now in advance of our French colleagues.

Wonder is sometimes expressed that neuroses did not occur in previous wars. Gavin in his work on *Feigned Disorders* (published in 1843) showed familiarity with many of the symptoms of what has been called 'shell-shock,' and my own experience has taught me that during and after the South African War men received pensions for war neuroses, though the conditions were called by other and varied names.

Although I have emphasised our unpreparedness to meet the immediate problem of the war neuroses, yet a curious parallel to them is to be found in the history of that condition which used to be called 'Railway Spine.' This was for a long time regarded by many people, professional and lay, as due to organic injury, and it needed the controversial efforts of the late Furneaux Jordan and of Mr Herbert Page to demonstrate its emotional nature. A quotation will illustrate the parallel and show the insight these surgeons had obtained into the condition. Furneaux Jordan wrote in 1881:

The incidents of a railway accident contribute to form a combination of the most terrible circumstances which it is possible for the mind to conceive. The vastness of the destructive forces, the magnitude of the results, the imminent danger to the lives of numbers of human beings, and the hopelessness of escape from the danger, give rise to emotions which in themselves are quite sufficient to produce shock, or even death itself<sup>1</sup>.

<sup>1</sup> Quoted from *Railway Injuries*, p. 28.

Modern warfare has enabled us to conceive more terrible circumstances than those of a railway accident, but even to the emotional aspect of modern warfare the description I have just quoted can be properly applied.

The identity of the chief factor in the two conditions being established, we need not be surprised to find all the symptoms of shell-shock described in Mr Page's book on *Railway Injuries*, which was written in 1890.

The period of amnesia after shell-shock, sometimes accepted as due to concussion, can be recognised in this description: "I have myself regarded this as a dazed condition, the result of fright, and have never thought it strange that some persons should have been unable to give any account of what transpired, or what they themselves did after a collision" (p. 70).

Scarcely a symptom of shell-shock or war neurosis escapes notice in this book; even the cardiac disturbances—the official 'Disordered Action of the Heart'—are noted. It would be waste of time to enumerate all the symptoms, but I shall find it useful to refer again to this work in dealing with some aspects of our subject.

The problems of medicine and surgery produced by the war were all to be solved by an extension of ordinary methods, whether of investigation or technique: trained men were in plenty and every well-prepared and efficient practitioner could understand and take part in the work. But although recent developments of analytical psychology had thrown much light upon mental disorders yet the application of the new ideas was far from being generally accepted, and even the diagnosis of the neuroses and psychoneuroses had been neglected in our medical training. There was in the army a disinclination to admit their existence—except as shell-shock—a disinclination fostered by the fact that when they were diagnosed the problem of the patient's disposal and treatment became a difficult one. It was far easier to treat them as organic diseases, and the medical officer who recognised the hysterical character of a supposed organic disease could do very little unless he were able to treat it himself. I became aware during the war that our hospitals contained large numbers of men suffering from hysterical conditions which were diagnosed as organic, and tried as far as possible to draw notice to the state of affairs so that 'the rot' might be stopped; but I did not foresee what would be the ultimate result of invaliding these men out of the army with a pensionable disability.

When the treatment of shell-shock became an insistent problem the function of the psychotherapist was recognised and the War Office

established centres at Maghull and Seale Hayne to which cases were sent and where medical officers were trained in psychology and psychotherapy. Some of the needs of the occasion were thus met in the middle of the Great War, but even now the Ministry of Pensions finds it necessary to train men for the treatment of pensioners. Thus we find that in this important speciality medical men have to be trained practically *ab initio* under a Government department.

The mere boarding of pensioners and the just assessment of the disability calls for special knowledge and understanding. It is, I think, only after treating on psychological lines a fair number of pensioners that one can understand the disabling nature and unconscious origin of symptoms which at first sight are fantastic and imaginary. Speaking for myself, I am aware of the great difficulty of forming a correct judgment, at a single interview, of a man's symptoms, temperament and attitude towards reality. The untrained observer often brings to bear upon the subject a breezy dogmatism which is rarely justified, and he tends to fall into several errors: to accept a functional disease as organic, to overlook that tendency of the psychoneurotic, even before a pension board, which makes him stress his bodily and say nothing about his mental troubles, and finally to regard anxiety symptoms as something that can properly be ignored. The Ministry is meeting this difficulty by the scheme of training mentioned above.

Having given this brief survey of events I now come to consider the present situation. The numbers involved cannot be statistically investigated, for many are still hidden under diagnoses which give no hint of the true condition; but I am ready to believe that about one-third of all pensioners are suffering from symptoms which, whatever the diagnosis may be, are largely neurasthenic.

Although it is still convenient to talk of a shell-shock group yet with the lapse of time the shell-shocked men become indistinguishable from those whose conditions arose from other and different presumed causes; they only differ by their symptomatology being to some extent still related to war repressions. I can produce no evidence, but I believe that the shell-shock patient tends to recover better than the man who broke down at home, even though his symptoms were at first very severe. I would make the generalisation that the amount of stress endured before break-down is a measure of the man's original stamina and hence of his likely response to treatment. The tendency to spontaneous recovery seems lacking in the men who broke down early; it is in them more particularly that we see deterioration taking place in two directions—in the develop-



ment of further symptoms and in the loss of the social sentiments as expressed in the desire for social and economic adaptation.

The history of these men is often as follows: a short period of service is followed by an illness which may be ascribed to a minor accident, exposure, the stress of training, typhoid inoculation, or any trivial cause which provides an opportunity for a neurotic flight from reality. The original symptom is an isolated physical complaint—myalgia, laryngitis, gastritis, contused back, will serve as examples—but as time passes others are added and the symptom-complex grows till the final result may be an anxiety state (veiled perhaps by the hysterical symptom) identical with that reached by the shell-shock patient. The cause of this accretion of symptoms might be profitably discussed, but at present I only draw attention to the process.

The loss of the social sentiments runs a parallel course but in the shell-shock group we are dealing with a type of man who is less likely to suffer this loss and who often succeeds, though under great difficulties, in facing the realities of life. The other type seems to deteriorate steadily, and I emphasise this deterioration because it forms a great part of our problem.

A disturbing phenomenon is the occurrence of nervous break-down among ex-soldiers at varying periods after demobilisation. It seems a paradox to ascribe this to the strain of civil life; but army life away from the front line was to some extent and for some men well-ordered and free from worry. A man's position and pay were secure, his family received their allowances and he needed to take but little thought for the morrow. Demobilised and faced by the need for initiative and personal responsibility, he takes flight from reality in a neurosis. That is one explanation, but there is another; he has passed through the stress of war and is, more or less wittingly, trying to forget it. If his repressed memories have sufficient affective content any stimulus may suffice to produce symptoms. I will describe a case of this nature.

A man of the regular army went to France in August, 1914, and was in the fighting from that time till the armistice; he reached the rank of sergeant, was mentioned in dispatches, and was always a brave soldier on whom his officers placed great reliance. Demobilised early, he bought a motor-car and set out to earn his living with it. He carried on for a time and then began to be afraid of an accident; this nervousness increased till he had to give up driving and finally he sold the car and had to live, with his wife and child, partly on the charity of his father. In October, 1919, a neighbour sent him to me to see if I could help him.

He then had a 'hysterical' limp, was full of strange fears, afraid to come alone to my house at night, and in his own words "scarcely knew what he was doing." His wife described fugues which the man himself hardly remembered.

I could not undertake the whole treatment of the case and as the wife was an intelligent woman I tried an experiment. In her presence the man quickly went into a hypnoidal state in which he abreacted part of his experience, and she undertook to carry on the same treatment at home. She succeeded very well and between them they recovered a great part of the repressed material with appropriate abreaction; it included apparently every emotional incident that had occurred during over four years of fighting. At intervals he came to me and I recovered memories which had defeated the wife. He is now free from distressing symptoms and is at work, but has regressed so that he has a feeling of dependence, has little initiative and has a curious habit of going to haunts of his boyhood and sitting there in meditation. I spent about twenty hours upon the case, even with the useful and time-saving help of his wife, and mention this to show one practical difficulty in treatment—that is, the time involved.

In this case there was no doubt concerning the main factor in the production of the psychoneurosis—the War. The case also suggests that when break-down occurs after demobilisation a superficial interrogation about a man's war experiences may enable one to judge how far war repression is responsible for the symptoms. A positive result may be very striking, something approaching to an abreaction being produced quite readily.

When we consider the difficulties inherent in the treatment of the psychoneurotic patient of civil life—the evasions and rationalisations, the wilfulness and conscious resistances, as well as the influence of friends and relatives—we are prepared to meet similar difficulties with the neurasthenic pensioner; and they are not lacking.

It is hardly necessary to say that treatment must be directed by psychological principles, and whoever has seen a strong abreaction on the revival of a war memory can have no doubt concerning the importance of the mental processes involved and the need for treatment along the lines indicated. But the patient must be willing to go through a process which is extremely unpleasant and even painful; hence often arises a clinical difficulty when a man bluntly refuses to take his share in the work.

Here I will note a curious observation:—if you meet a patient who

has been treated by abreaction or by the discussion of his war experiences and ask him how he was treated he will hardly ever tell you that he was made to talk about the war, but will give all kinds of evasive answers. In fact, the tendency to repress again is almost constantly present. Some explanation appears necessary in regard to the position of psycho-analysis in this connection; abreaction and a re-arrangement of the man's attitude to his symptoms and to life generally are not psycho-analysis, though they depend upon psycho-analytical technique and are based upon the theory of the unconscious. I believe that very few war cases have been psycho-analysed in the sense in which that word is used by competent psycho-analysts, though in many cases the mental exploration has to be carried past the war material.

But it is not my intention to discuss methods of treatment except to point out how necessary are the goodwill and active assistance of the patient and that in this respect the psychotherapist in a military hospital, especially after the armistice, was in a more favourable position than is he whose duty it is to treat pensioners.

Not only were the men more under control but resistances tended to disappear by the example of successful results; moreover, the prospect of discharge on a cure taking place led to the same end. This last factor sometimes acted detrimentally, for the hiding of symptoms in response to a stimulus is not equivalent to their removal by analytic means.

A large proportion of pensioners are willing subjects, especially, in my opinion, those with a low assessment, for their effective disability is often low on account of their efforts towards recovery, though their symptoms may be really serious and distressing.

But in many, especially those with a history of early break-down, good results are more difficult to obtain for there is obviously a more powerful neurotic tendency to deal with. In some it becomes clear that the neurosis has mastered the situation; the pensioner is practically at liberty to refuse treatment and often does. Or he may clamour for it and the remorseless urge of the neurosis uses the opportunity for its own ends; the man presents himself insistent upon his desire to be cured and yet opposes the process of cure at every turn; then the failure of treatment further strengthens the neurosis. The cult of the rest-cure and of massage and electricity as standard treatment for 'nerves' has now reached all classes of the community, and in the absolute passivity required of the patient they appeal particularly to the man who wishes to demonstrate his desire for treatment.

There are others more unfavourable still who were ne'er-do-wells and

failures before they enlisted. I was familiar with one type in the army; he would join up and be quickly discovered to be useless, be discharged as 'unlikely to become an efficient soldier,' and almost as quickly enlist again. In one case four enlistments from the outbreak of war up to March, 1916, had each resulted in the man being invalided out of the service. I have no doubt that his disability is now fairly high.

But even in men who now have the appearance of the ne'er-do-well we find some who have good records and respond to treatment. It is sometimes almost impossible to believe that a man who looks as if he has never been anything more than a querulous loafer should once have been a good citizen and a brave soldier; yet I have seen a few such men—only a few—restored to decent citizenship.

This deterioration of a good soldier is so hard to believe when we see the man at his worst that I will quote some fragments from a description of a case by Mr Page:

A tall powerful man was in a very severe and destructive collision. He received a few bruises and fractured the bones of his nose; he was not stunned. A friend beside him was killed; this seemed to prey constantly upon his mind. He lay for several days in a state of great depression.

Nine weeks later he was in a most feeble and wretched state. His mental condition showed extreme emotional disturbance. (Here hysterical symptoms are described.)

Four years after the accident, long after his claim for compensation had been settled, his medical attendant writes: His appearance is much altered; his voice is weak, almost gone at times; very depressed spirits, palpitation, loss of sleep, bad dreams, very easily tired, can't walk more than two miles. Has lost all his energy. Great dread of impending evil. Can't drive without feeling frightened all the time. (This description closely fits the symptoms of many neurasthenic pensioners.)

His doctor adds, "I knew him well before the accident, and he was a very energetic and very honorable man."

Three years later, *i.e.* seven years after the accident, his symptoms were still subsiding. Since he began regular work he had continued more markedly to improve.

This account may enable us to appreciate the real deterioration that may follow shell-shock and to picture the probable original condition of some of our socially useless pensioners.

There are one or two types that give trouble in particular directions. Pathological irritability is a very real trouble, of which a man may complain whilst recognising its inadequacy. In some of those cases where shell-shock is pleaded in extenuation of crimes of violence I believe the plea is well-founded though I express no opinion as to how far it should be judicially recognised.

The pathological confabulator is to be reckoned with, and many complaints concerning treatment arise from such men. I give one



example, in my book on the psychoneuroses, of a joint confabulation, almost delusional, which affected several men. In another case a young man of good family caused great distress to his father (a very old friend of mine) by a heart-rending account of maltreatment and starvation in a hospital to which I was attached and which was managed upon the kindest and most efficient lines.

So much for the problem as it concerns the individual patient: now I come to what I call the pension dilemma. We have no concern as clinicians with the rights or wrongs of pensioners, but we have to consider the relation of the pension to the maintenance of symptoms, a relation which does not exist in regard to organic conditions.

One frequently hears the word 'pensionitis,' coupled with the suggestion that to reduce or stop a neurasthenic's pension will aid in his recovery. In considering this point we may divide the symptoms into two groups: one the direct result of the repression of war experiences such as could be removed by abreaction, and it is difficult to see how a pension could affect them in either direction, though one must admit that even such symptoms may disappear, temporarily at least, under strong stimuli.

In the other group are those symptoms which are an expression of the inability to face present reality; this is difficult ground indeed, for we know that the supposedly healthy man feels the curse of Adam and even if he has the urging of creative or other socially useful impulse he tends to avoid the unpleasant and seek the pleasant task. Some stimulus is needed for him to face the unpleasant, and how much more necessary is a stimulus to the neurasthenic. This was seen in practice in special war hospitals, where good results often followed a gentle intimation that proof of ability to work was a preliminary to discharge.

So far, then, as a pension removes the need for work it may be harmful; but except in cases of severity the amount of the pension is not sufficient to remove the need for work, though it may serve as a strengthening of the plea, or a feeling of, unfitness.

I will put the question plainly. Are there many cases in which the stopping of a pension would in itself lead to recovery? The answer, in my opinion, is No. (From this discussion I exclude malingering, or the conscious simulation of disease for a definite end; though I am aware that the pensioner, neurasthenic or not, is no more free than other people from the promptings of a conscious self interest.) In so far as the neurosis is a flight from reality, the pension aids in the flight; but that is not to say that the pension maintains the disease. If it were possible to place certain men in such an environment that there would be no gain

from the neurosis but everything to gain from recovery, then treatment, otherwise ineffectual, might succeed; but to stop a pension does not give us this possibility.

Yet there are, I believe, some cases, chiefly those showing a certain type of hysteria, in which the cessation of the pension would remove the symptom. They are few, and few psychotherapists would like to diagnose them.

In regard to railway injuries it is now a truism of the text-books that when the claim is settled the patient often makes a speedy recovery, though this is not invariable as the case of Mr Page's, quoted previously, illustrates. At one time the plan of giving gratuities was tried with men suffering from shell-shock but proved a complete failure and has been abandoned for two or three years; the men returned later with their symptoms unchanged or, to speak more correctly, unimproved. I saw two such cases where the men had re-enlisted. One, who proved a most satisfactory patient, had re-enlisted as a last resort when he had spent his gratuity and found himself unable to work and support his family: the other, when I questioned him as to his reasons for re-enlisting when he knew he was unfit, answered: "Well, the army made me like this and I reckoned it was their job to cure me."

In both cases the usual war repressions were found and unaided recovery was hardly to be expected.

There exists a definite state of mind which the French call *la psychose de revendication* and the Germans *die Rentengier*. It is not merely a desire to obtain a pension but its predominant affect is rather a sense of irreparable injury at the hand of society, for which the fullest compensation can never suffice. Dr Karl Abraham of Berlin regards it as favoured by state pension but only possible in those patients who already had a tendency to react in a narcissistic manner to assaults upon their self-feeling. Roussy and Lhermitte also dwell upon the importance of the previous temperament of the man.

One meets with this *Rentengier* sometimes in association with a pathological irritability which is not recognised by the patient. It occurs most often and most significantly in men who broke down early and shows itself in such phrases as "I was an A 1 man when I joined the army and look at me now, and I know I shall never get any better," together with an aggrieved and truculent manner. I regard the condition as pathological, and in some cases the question of paranoia has arisen.

Quite different is that frank statement often heard from a reasonable man, who has helped in his own treatment, that he is afraid for the future or even finds his present troubles are hindering his recovery.

When we consider the influence that a current trouble has in provoking

nervous break-down in civil life we must admit that the war neurasthenic is adversely influenced by his difficulties, whether financial or domestic. However much effort he makes he finds adjustment no easy matter and in many cases gives way to the strain. He finds extra difficulty in obtaining employment, for his disability affects him more disadvantageously than a bodily injury. The employer knows where he stands, for example, in regard to a one-armed man and can estimate precisely what are his capabilities. But we must realise that the neurasthenics are peculiarly unreliable; in some of them the deterioration has affected their social sense to such an extent that they are definitely dishonest and I must confess that I have often looked at a patient and thought that I should not care to employ him myself. One frequently hears the complaint that an old employer has found it impossible to reinstate the man, and one agrees that this action was inevitable.

I know an ex-officer who before the war held a responsible position abroad at £500 a year; he did good war service before a severe break-down, which came on after the armistice, but the medical officer of his old firm refuses to pass him as fit to go abroad again—and I think he is right; the Ministry has provided him with proper treatment, the alternative pension scheme has been to his advantage, and he receives a grant for his children's education. But he is now a clerk at £3. 10s. a week and the housing trouble makes him keep his family in the country whilst he lives in uncongenial lodgings in London. One can appreciate the effort necessary for the man to find his way back to health under these conditions, though he had enough stamina to take him through three years of campaigning and is now keen on doing the best for himself and his family.

We have to face the fact that economic conditions at the present moment, affecting as they do the well-being of the whole country, more particularly affect the neurasthenic pensioner. He is in the vicious circle of economic stress and his own disability; each reacts upon the other and increases its evil effect. Thus the man is led to rely more and more upon his pension.

We can now sum up the chief elements in the problem:

1. The deterioration that takes place in the power of the pensioner to face the realities of life.
2. The administrative loss of control over the individual, whose outlook may be distorted and whose neurosis is master of the situation.
3. The need for a pension and at the same time the need for a stimulus to recovery.
4. The special difficulty of the pensioner in facing the economic struggle.

## PSYCHOLOGY AND THE UNCONSCIOUS<sup>1</sup>.

By T. W. MITCHELL.

IN psychology, as in every-day speech, the terms conscious and unconscious, consciousness and unconsciousness, are often used ambiguously. To be conscious implies, or ought to imply, present awareness; and consciousness should refer only to the 'field of consciousness' at any moment. But very often consciousness is used as a collective concept to denote the totality of mental processes, and by the older psychologists it was commonly used as the antithesis of 'matter,' very much as we now use the word 'mind.'

Even up to the present time some people think that consciousness and mind are synonymous terms. There are two senses in which this opinion may be held. It has been maintained by some writers that only what is in the field of consciousness at any present moment is truly mental, and that when a presentation passes out of the field of consciousness it passes literally 'out of mind.' By these writers the problem of mental retention is solved by supposing that the 'memory-traces,' whose existence we must assume in order to account for conscious recollection, persist in the form of 'brain-traces' which have no mental counterpart until they are again roused to functional activity accompanied by consciousness.

On the other hand, when consciousness is used to include the whole mass of psychical manifestations, the totality of the mental processes of the individual, it is implied that there is much in the mind that is not in the conscious field of the moment, but nothing which is not now, or has not at some time been, in consciousness in this strict sense of the word. On this view memory-traces exist as mental traces or dispositions, and in their latent state as well as in their active state form part of the mind.

In these two senses, then, it has been held that consciousness and mind are equivalent. The former view is very commonly held by physiologists. The latter is that which has been held by the majority of psychologists up to recent times.

When those who believe that the passing wave of consciousness

<sup>1</sup> Read before the Medical Section of the British Psychological Society, Dec. 22, 1920.



alone is truly mental speak of an idea becoming unconscious, they mean that it has no longer any existence except in the form of some physical trace left in the *brain*. And the brain, as material substance, is unconscious in the same sense as inanimate objects are said to be unconscious. If, however, we believe that when an idea passes out of the conscious field it leaves behind a trace or disposition in the *mind*, the total sum of such mental dispositions, so long as they are latent, may be said to form an unconscious part of the mind. And this is a use of the word unconscious which is very commonly made.

So long as cerebral traces or mental dispositions give no evidence of activity it may be convenient to speak of them as unconscious, if we suppose that so soon as they become active they will manifest in consciousness again. But when evidence is found of the occurrence of mental activity which does not appear in consciousness and cannot be discerned on introspection, the inadequacy of this distinction between conscious and unconscious becomes apparent. The static physical view of unconsciousness—the hypothesis of brain-traces, has to be supplemented by some sort of ‘unconscious cerebration’ which is capable of doing mental work without any mental accompaniment; and, in the alternative hypothesis, the mental dispositions must be accredited with activity and consciousness in some degree, though not in a degree sufficient to attract the attention and be discerned on introspection. This latter supposition is the hypothesis of *subconsciousness* as this was first formulated by writers on general psychology.

We know that the field of consciousness has always a focus which is the centre of attention, and that outside this focus there is a margin in which discrimination becomes less and less exact as we recede from the focus; and the principle of continuity compels us to believe that beyond the margin, also, something of the nature of consciousness exists. This possibility is commonly described in terms of a psycho-physical threshold which can be overstepped only by such feelings or thoughts as attain a certain degree of intensity; and such thoughts or feelings as do not attain the necessary intensity are described as subconscious.

The need for postulating any subconsciousness beyond the margin discernible on introspection was not very keenly felt by psychologists so long as they confined themselves to the study of the normal mind; but when such facts as those revealed in Janet’s investigations of hysteria came to light, it became urgently necessary to find some term by which to describe them. The dissociated sensations and movements of hysteria were called subconscious by Janet, and it was very commonly

supposed that the subconsciousness of such hysterical manifestations was the same kind of subconsciousness as that which has been postulated by some psychologists as existing in every normal mind. Yet Janet himself has clearly shown that the hysteric's failure to perceive sensory impressions applied to an anaesthetic area is not due to lack of intensity of the modifications of consciousness so produced, but to a dissociation whereby these modifications fail to be assimilated to the 'personal consciousness.' For it is obvious, in his experiments, that there was some sort of awareness of the impressions which was not dim or confused, but was clear and discriminative. The most striking feature of this awareness is that it was an awareness concomitant, though not com-present, with the awareness of impressions received through other sense-organs which were not anaesthetic. There was a kind of consciousness which is best described by Dr Morton Prince's term 'co-consciousness.'

The implication of diminished intensity contained in the term subconscious makes the use of this word inadvisable when we wish to refer to such mental activities as those revealed in hysteria and multiple personality. Moreover, by using Dr Morton Prince's term 'co-conscious,' we emphasise the important fact that in these dissociations we have an actual splitting of *consciousness*, not merely a splitting of the mind. For we may have dissociation of the mind in which the split-off portion shows no evidence of being accompanied by awareness, and seems to be truly unconscious.

It would thus seem useful to have some other term to describe all that exists or takes place below the threshold of consciousness, whether it be subconscious or co-conscious or unconscious. The word 'subliminal' was used by Frederic Myers just in this way, and it would perhaps be convenient if we could still use it in the sense defined by him. He said: "The idea of a *threshold* (*limen*, *Schwelle*), of consciousness;—of a level above which sensation or thought must rise before it can enter into our conscious life;—is a simple and familiar one. The word *subliminal*—meaning 'beneath that threshold,'—has already been used to define those sensations which are too feeble to be individually recognised. I propose to extend the meaning of the term, so as to make it cover *all* that takes place beneath the ordinary threshold, or say, if preferred, outside the ordinary margin of consciousness;—not only those faint stimulations whose very faintness keeps them submerged, but much else which psychology as yet scarcely recognises: sensations, thoughts, emotions, which may be strong, definite and independent, but which by the original constitution of our being, seldom emerge into

that supraliminal current of consciousness which we habitually identify with ourselves<sup>1</sup>."

It may be seen that the ambiguity, already referred to, pertaining to the use of the word consciousness, follows us here if we try to be clear about the *locus* of the threshold. In the first part of Myers' definition he is obviously referring to a threshold which lies between what is in consciousness and what is out of consciousness at the moment; but in the latter part the threshold seems to separate that part of the mind which is capable of becoming conscious from a part which ordinarily has no such power. It is a threshold between the self that each of us knows by introspection, and a hidden self of which we have no direct cognisance.

Between what is conscious at the moment and what is unconscious or subliminal at the moment there is a clear distinction, and it would seem to be urgently necessary to distinguish also between that part of the subliminal which is capable of entering consciousness and the part which is not capable of doing so. Such a distinction has been drawn by Freud. That part of the mind which is out of consciousness at the moment, but is capable of entering into it—the memories of every kind which we have at our disposal—he calls the *Preconscious*. That part of the mind which is out of consciousness at the moment and is incapable of entering into it under any ordinary circumstances, he calls the *Unconscious* 'proper.' Preconscious ideas are latent because for the time being their activity is slight: they are too feeble to step over the threshold of consciousness. But, when they become strong, they overstep the threshold and enter the conscious field. Freud maintains, however, that some ideas, namely, those that are repressed, cannot enter into consciousness, no matter how strong and active they may be. Such ideas he calls Unconscious in the technical sense of the word.

It is perhaps unfortunate that Freud uses the word unconscious both in the descriptive sense of being out of consciousness at the moment, thereby making it include the preconscious, and also in the particular technical sense of the Unconscious proper—the unconscious constituted by repression. This double usage tends to set up a confusion similar to that which accrued from the old custom of using the word consciousness so as to include within it what we now call the preconscious, as well as what we may call the conscious 'proper.' Nevertheless Freud's division of mental contents into conscious, preconscious and unconscious makes for clearness and precision when we attempt to give a regional or topographical description of the structure of the mind.

<sup>1</sup> *Human Personality*, Vol. I. p. 14.

It is not, however, in a descriptive sense only that Freud employs these terms. He uses them also in a 'systematic' sense which is even more significant for his psychological theories. He conceives of the mind as a reflex system—a mental reflex arc—sensory or receptive at one end, and motor or executive at the other. Any stimulus applied at the receptive end sets up a movement which tends to spread to the motor end. The setting up of this movement, the initiation of any mental process, is accompanied by release of psychical energy, the accumulation of which is experienced as discomfort; and the goal of the activity set up is to effect the discharge of this energy and thereby to bring the system to a condition of rest again. The state of excitation, which is experienced as discomfort, is thus changed to a state of relief which is experienced as pleasure, and the tendency within the mind to effect this change is what Freud calls a 'wish.' The chief characteristic of such a mental system is the freedom with which it permits the psychical impulse to spread through all its parts in search, as it were, for some outlet for the discharge. When this is achieved, pleasure is experienced, so that the purpose of the movement may be said to be the pursuit of pleasure; the system is actuated by what Freud calls the 'pleasure-principle.'

At first the tendency of a movement set up within the system is to regress to the sensory end of the mental arc, thereby affording hallucinatory gratification through revival of the sensations which had accompanied previous gratifications. But very soon this is found to be unsuitable to the demands of the 'real' world, and a secondary mental system arises, or comes into action, which secures the inhibition of the tendency to regression, and directs the impulses towards the motor end of the mental arc so as to bring about, by action upon the external world, the changes necessary for the production of a real gratification instead of an imaginary one. The activity of this secondary system is guided by what Freud calls the 'reality-principle' in contradistinction to the pleasure-principle underlying the activities of the primary system.

The secondary system does but control and guide the energies of the primary system so as to secure more adequately the gratifications which the primary system strives for, but achieves only imperfectly because of its want of conformity to reality. So long as they are in agreement as to what is pleasant and what is unpleasant they work harmoniously together. But a time comes when disagreement sets in. With the development of the child's personality it comes to pass that what causes pleasure in the primary system causes pain in the secondary



system. The task of the secondary system here is no longer to control and guide the tendencies of the primary system towards a real fulfilment of its wishes. The wishes of the two systems are not now the same. The tendencies which give pleasure to the primary system give pain to the secondary system, and the secondary system tries only to avoid these tendencies and get away from them. Thus arises a divorce between the two systems which results in the establishment of the mechanism of repression, and the formation of the two mental systems which we call the unconscious and the preconscious.

The primary and secondary systems are thus the fore-runners of the unconscious and the preconscious. The unconscious retains all the characteristics of the primary system. It is guided solely by the pleasure principle; it can do nothing but wish, and in the pursuit of the gratification of its wishes the freest possible movement of the psychic impulse is permitted, just as in the primary system. And just as the secondary system does not always succeed in mastering the tendency to regression, so the preconscious is ever at war with the unconscious, and sometimes becomes subject to its domination. It is the conflict between them which gives rise to the mechanism of repression, and the earliest repressions thus brought about form the core of the unconscious throughout life.

The whole of the content of the mind would seem to be divided by Freud into that which, in the systematic sense, is preconscious and that which is unconscious. The content of consciousness is really part of the preconscious system. Consciousness itself he compares to a sense-organ which perceives certain processes set up in the preconscious. Some of Freud's disciples seem to suppose that Freud was the first to make the comparison of consciousness to a sense-organ, but it is really a very old notion in psychology. A very similar view may be found in the writings of the Scottish school of philosophers and of their French followers at the beginning of the nineteenth century. Royer Collard, for example, held that "our sensations, acts, thoughts, pass before our consciousness as the waters of a river under the eye of a spectator on its banks." Consciousness has also been compared to a stage on which plays are acted, but this simile would apply better to that part of the preconscious of which consciousness is the spectator.

Whether or not the comparison of consciousness to a sense-organ is legitimate, it is useful in that it emphasises the fact that neither the contents nor the processes of consciousness have any peculiar characteristics other than those that belong to the preconscious. The preconscious contents are just those that are qualified to enter consciousness.

and conscious process and preconscious process have been one from the beginning. On the other hand, the contents of the unconscious are just those contents of the mind which are disqualified from entering consciousness in undisguised form, and unconscious process has been different from preconscious process from the beginning.

Freud does not often use the metaphor of a threshold in delimiting the different regions of the mind, but just as we speak of a threshold between the conscious and the preconscious, so we may say there is a threshold between the preconscious and the unconscious, but this threshold has a barrier. The doorway here is not freely open to every idea that is strong enough to overstep the threshold. There appears to be a doorkeeper—the Freudian ‘censor’—who discriminates between the applicants, and selects those that may be admitted into the preconscious. The censor has behind him all the repressing forces which keep out of the preconscious those ideas that would be unbearable if they became conscious.

The unconscious due to repression is the true Unconscious of Freudian psychology. It is that part of the mind which retains the characteristics of the primary system, is guided by the pleasure principle and is under repression. The preconscious is that part of the mind which retains the characteristics of the secondary system, is guided by the reality principle, and is the source of the repressing forces.

This is the systematic meaning of the term unconscious which, in its descriptive meaning of being merely ‘out of consciousness’ includes the preconscious. To say that a thought or mental process is unconscious should, in psycho-analytic writings, be held to imply that it belongs to that mental system whose mode of functioning corresponds to what Freud calls the primary process; but it cannot be said that authors have adhered to this usage, or that the context always makes it clear when it is used in the descriptive and when in the systematic sense.

A further source of confusion is found in the fact that certain preconscious contents which form associative connections with unconscious contents are subject to repressing forces; their emergence into consciousness is met with resistance, and they are therefore, in the systematic sense, unconscious. Freud provides for them a second censor which he places between the conscious and the preconscious.

Freud’s explanation of the origin of the Unconscious accords well with the nature of its contents and processes which he discovered by the technical methods of Psycho-Analysis. We are prepared to find that the Unconscious consists essentially of just those tendencies or

wishes whose satisfaction gives pleasure to the child, but are reprehensible or painful to the adult. And this is indeed the teaching of Psycho-Analysis. The Unconscious is just the infantile mind, persisting throughout life, covered over, as it were, by the adult mind which has developed in response to the claims of reality. Moreover, this infantile part of the mind is not wholly derived from the childhood of the individual; it is partly derived from the childhood of the race. And some of the tendencies derived from this latter source have never entered consciousness at all, but have been under repression from the beginning. Of the same nature are the emotional reactions which arise when the change in the affective values of the primitive tendencies supervenes. We must believe that the readiness so to react is an inherited function of the preconscious, and that its emergence in the child is part of the recapitulation of racial history and marks the period of man's transition from the brute to the human.

If all psychologists accepted Freud's conclusions as to the origin and nature of the unconscious there would be little room for ambiguity in the terms used to delimit the different regions of the mind. Indeed, if all those who more or less consistently use his technical methods and base their conceptions on the results of mental analysis, could have adhered to his nomenclature so far as it served their purpose, we should have been saved some of the difficulties which beset our path when we try to correlate the findings of the different schools.

The Zürich school of Analytical Psychology founded by Jung is an offshoot from the psycho-analytic school of Freud; but, as is well known, Jung has in recent years diverged in several directions from the psycho-analytic stand-point. One of the most important of these divergences concerns the nature and origin of the unconscious.

Jung defines the unconscious as "the totality of all psychic phenomena that lack the quality of consciousness." He says that instead of being called unconscious, these phenomena may equally well be called subliminal—a term which, in his view, presupposes the hypothesis that each psychic content must possess a certain energetic value in order that it may become conscious. Such an admission would seem to imply that, in Jung's view, every content of the unconscious is unconscious because it has not sufficient energetic value or intensity to overstep the threshold. This would exclude the whole of the true unconscious of Freud, because an essential characteristic of a psychic content that is unconscious in the 'proper' Freudian sense, is that it cannot enter consciousness simply in virtue of its strength or activity. Yet Jung

believes that, in addition to all lost memories, and the subliminal associations and combinations of these that may occur, an important part of the unconscious results from 'intentional repression' of painful and incompatible thoughts and feelings.

It is doubtful how far the results of intentional repression correspond with those due to the repressing forces which come into play without any conscious intention; and this latter form of repression is of prime importance in the formation of the Unconscious of Freud. However this may be, Jung explicitly states that the 'personal' unconscious contains intentional repressions as well as all lost memories and the subliminal combinations they may form.

He calls these contents of the unconscious 'personal' because they are all derived from experience in the individual life, and are unique in every person. But he postulates another stratum or form of the unconscious which is not the product of experience during the individual life, but is inherited or innate. It contains the psychic potentialities which are common to every individual, such as the instincts and the congenital conditions of intuition—the 'archetypes of apprehension,' as he calls them. The sum of these inherited psychic potentialities he calls the 'Collective Unconscious,' because they are common to all men, and not unique individual contents like those which form the personal unconscious.

The collective unconscious is the part or form of the unconscious on which Jung now lays most stress. Here are to be found the instincts which we all have in common. Here also are those primordial forms of thought and feeling which determine the uniformity of our apprehension of the world and form the basis of intuition. They are the source of all the myths and legends and religions of humanity, whose similarity amongst all peoples and in all ages is accounted for by their common origin in the collective unconscious of the race. In normal life they come to light in more or less disguised form in dreams; in the neuroses they press obtrusively upon the conscious personality, making difficult that adaptation to reality which is man's chief task; in the insanities they break through the accretions of ages of culture and civilisation, and manifest in their primordial forms.

In primitive man, according to Jung, when personal differentiation is only beginning, "his mental function is essentially collective. He is more or less identified with the collective psyche, and therefore without any personal responsibility or inner conflict; his virtues and vices are collective. Conflict only begins when a conscious personal development



of the mind has already started....The repression of the collective psyche, in so far as it was conscious, was a necessity for the development of the personality, because collective psychology and personal psychology are, in a certain sense, irreconcilable....A collective point of view, although it may be necessary, is always dangerous for the individual."

It is interesting to compare the factors in this repression of the collective unconscious with those involved in the repression of the primitive impulses as described by Freud. The opposition between society and the individual is present in both; but the collective is repressed because it is dangerous to the development of the individual; the primitive impulses are repressed because they are dangerous to the development of society. Repression of the collective is a reaction of the individual against the encroachments of the social consciousness; repression of the impulses is due to a reaction of the social consciousness against the egocentric tendencies of the individual.

In Freud's psychology, the two great subdivisions of the mind are the preconscious and the Unconscious. In the psychology of Jung a similar importance is ascribed to what is personal and what is impersonal or collective. It is evident that the different bases of classification employed by Freud and Jung lead to cross-divisions, so that it is difficult to be sure in what division of the one classification any particular content in the other should be placed. The true Unconscious of Freud would seem to correspond in many respects with the impersonal or collective unconscious of Jung; for the primitive impulses, which form the core of the Freudian Unconscious, and the primary process which it retains as its mode of functioning, must be deemed to have universal validity since they are common to all mankind. In so far, however, as the primitive impulses acquire individual differentiation in infancy, they must be regarded as pertaining to the personal unconscious. But in the true Unconscious of Freud, as in the collective unconscious of Jung, is to be sought the origin of unconscious phantasies, of the language of the dream, and of the myths and legends of humanity.

Such, in barest outline, are the two main conceptions of the nature and content of the unconscious which hold the field in psychopathology at the present time; and I would like to make a few brief comments, (1) on the relation of these views, one to the other, (2) on their relation to certain problems of psychopathology, and (3) on their relation to the science of Psychology as a whole.

Although at first sight there may not seem to be any serious incompatibility between the two views, yet we know they form the founda-

tions on which have been built up two systems of psychopathology and psychotherapeutics which, although they had a common origin, have diverged so much that they seem to be pointing in opposite directions. The differences between the two schools cannot be said to be wholly due to differences about the nature of the unconscious; but some of them are directly dependent upon these, and only in so far as we may find common ground between the two views of the unconscious can we expect to find any common outlook on therapeutic problems and aims.

Jung appears to have discarded Freud's distinction between the preconscious and the unconscious; and this is all the more unfortunate in that he includes so many different kinds of content in the unconscious. At one time he speaks as if the personal unconscious consisted solely of repressed materials of a personal nature; at another time he tells us that in the personal unconscious are to be found all the lost memories as well as intentional repressions of painful and incompatible thoughts and feelings. If we may judge, however, by accounts of analyses conducted by Jung and his pupils, the personal unconscious would seem to have comparatively little importance ascribed to it. The 'undifferentiated co-function' and the myth themes revealed in dream and phantasy seem to be the main objects of interest. The discovery and the adjustment of the individual's relation to the collective unconscious seem to have taken the place of the patient following out of the bypaths into which the *Libido* has strayed which we associate with Psycho-Analysis.

The undifferentiated co-function is sometimes said to be unconseious because it has been neglected, sometimes merely because it is undifferentiated, and sometimes because it is repressed. If it has merely been neglected, all that should be necessary to restore it to consciousness would be to direct the attention to it. There seems no reason why its restoration should be accompanied by resistance. On the other hand, if it is under repression, we ought to know what is the nature of the repressing forces, and what is the principle to which they conform. Are we supposed to be dealing with the pleasure-pain principle concerned in Freudian repression, or are there other grounds for repression and resistance? The lack of clear indications on this point may be due to the slight emphasis which Jung now seems to put upon repression, but when repression is absent, resistance in analysis should be absent also, unless some reason for resistance, other than repression, can be given.

An interesting feature of the work of the Swiss school is the way they deal with the myth themes and the symbolism of dreams. They seem to deny the need for a reductive interpretation of these psychic

formations, and they lay so much stress on the importance of their anagogic interpretation that they seem to regard the appearance of a myth theme in dreams as affording an infallible indication of the life-line that the patient must follow if he is to escape from his neurosis.

The potentiality of human imagination which enables each individual to generate within his mind the great primordial images, is a problem of great interest to genetic psychology. Jung seems to guard himself against the implication—inherent in much of his writing—that the primordial images are themselves inherited, and asserts only that the potentiality for the formation of such images is part of the innate endowment of the mind. The need for this caution seems based on a belief that bodily inheritance is in some way more real and more explicable than mental inheritance, but it is doubtful if there are any good grounds for such a belief. For just as in the unfolding of the bodily organs from the material germ we find the recapitulation of our ancestry revealed by such archaic remnants as the gill-slits and the swim-bladder, so in the unfolding of the mind we find a stage or level in which the primordial images reappear in their original form. And so, not only is the capacity for myth and symbol formation innate in the mind, but the very symbols and myths themselves, which our forefathers formed, are there also from the beginning. Dr Ernest Jones believes that they are produced anew by each individual, in virtue of the uniformity of the ways in which the human mind reacts to those primordial interests on which myth and symbol are founded, but Freud, if I understand him aright, is inclined in this matter to adopt a view very similar to that of Jung, and to believe that these archaic products of human imagination are there, in each individual mind, from the beginning.

The Freudian view of the Unconscious is more definite and precise than that of the Swiss school. It is just the infantile mind, still subject to the primary process, and still striving for the gratification of the primitive impulses. Complicating this simplicity, however, is the fact that preconscious contents may fall under the sway of unconscious wishes, and, being thereby charged with the affective tone of the Unconscious, become subject to a censorship which prevents their emergence into consciousness. Notwithstanding this possibility and its far-reaching consequences, we may still feel it hard to believe that everything in the mind that cannot enter consciousness is under direct or indirect repression. This difficulty is especially acute when we consider the creative side of mental activity. We get here the impression—conforming to Jung's view—that some things do not enter into consciousness

because they are not yet ripe or ready to do so. Presumably such ideas belong to the preconscious system, and their non-emergence into consciousness is due to a lack of the intensity necessary to enable them to cross the threshold. But when we survey the whole field of man's mental activity, and take cognisance of those of its products which show signs of subliminal incubation, we may sometimes be in doubt concerning the regional localisation of processes which, in the descriptive, if not in the systematic sense, are unconscious.

This difficulty of fitting into the analytic frame-work certain facts of observation is met with also in the field of abnormal psychology. In pre-analytic days, the hypothesis of mental dissociation was our most widely useful concept in the study of abnormal states. From the beginning, Freud tacitly accepted the fact of dissociation, and seemed to imply that only in the explanation of how it is brought about did he differ from Janet's views on this matter. Substituting certain dynamic forces for Janet's *misère psychologique* he left us to suppose that every form of dissociation could be ascribed to mental conflict and repression. But when we consider such a form of dissociation as, for example, a hysterical paralysis of the arm, we see that on Janet's hypothesis the ideas and feelings related to the use of the arm have become dissociated from the personal consciousness. According to Freud, however, dissociation in such a case bears primarily on a totally different system of ideas. It bears on some wish, which, after being dissociated as a result of mental conflict and repression, becomes converted into this particular physical disability. But the motor disability is itself a dissociation as Janet has shown, and it is not a dissociation directly due to conflict and repression. It is due to an 'adaptation for conversion' which, apart from the bare statement of its occurrence, Freudian doctrine has done nothing to explain.

Hypnotic dissociation, and the dissociation of somnambulism and of multiple personality, present difficulties of another kind. Here it may be supposed that dissociation in mass of all the thoughts, feelings and actions related to some painful experience, or to one side of one's character, may be due to conflict and repression; but the subsequent behaviour of the 'secondary state' or secondary personality does not seem to conform to any of the mechanisms described by the psycho-analysts.

Again, as I have frequently pointed out, analytic doctrine takes no account of the problem of co-consciousness—indeed the very existence of such a problem is denied by Freud. He does not seem to have met with any clear example of it, and in his references to this subject he



confuses the co-conscious with the simply alternating type of secondary personality.

There are, as it seems to me, many facts of observation and experiment acquired by technical methods other than psycho-analysis, which we are in danger of forgetting if no effort is made to bring them into conformity with our newer knowledge; and a greater tolerance and a freer co-operation between exponents of different methods of psychological enquiry and of psychotherapeutics are greatly to be desired in the interests of psychopathology and of the science of psychology as a whole.

But although there is room for more co-operation among workers in these specialised fields of study, perhaps the greatest need of the present time is that clinical psychology should make and maintain closer contact with general psychology in all its branches. This need is, I think, especially great in the case of those whose first approach to the science of mind has been by way of Psycho-Analysis or of 'Analytical Psychology.' I am told that by some young people psychology is being regarded as a 'back-number,' and that anyone who wants to be up-to-date should forthwith plunge into the study of Psycho-Analysis without any preliminary training. These people will have to learn that, before Psycho-Analysis was, there was a science of Psychology, and that there will be a science of Psychology when Psycho-Analysis, except as a technical method, may be no more. All that is true and valuable in the body of doctrine which the different schools of analysis are building up, must, in time, become incorporated in that more general body of knowledge which we know as Psychology. That Psychology will be transformed by such incorporation I have little doubt; that it will be in any sense superseded, or its past gains rendered nugatory, I do not believe. Too great engrossment in any special line of work is apt to lead to narrowness of vision, even in those who come to such work prepared by wide general culture and adequate preliminary training. It is therefore incumbent on all of us whose work consists in the study of abnormal mental states by special technical methods, that we should keep in touch with the labours of our colleagues in other departments of Psychology. It is our good fortune, as members of the British Psychological Society, to have unrivalled opportunities of so doing.

## CRITICAL ABSTRACT.

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A short but very interesting and suggestive article by Hermann on the subject of "Intelligence and Depth of Thought" opens this number. It is an attempt to establish some connexion and relationship between the older conceptions of the meaning of the word intelligence, as formulated by psychologists of the academic school, and such contributions as psycho-analysis can render to the solution of the problem.

Much attention has been devoted in recent years to experiments in testing the intelligence of children, students and so on, and Stern has arrived at a definition of intelligence in the course of such work which Hermann takes as a starting-point. It runs: "The intelligence is the general capacity of an individual to direct thought consciously on to new requirements; it is the general mental capacity for adaptation to new demands and conditions in life." In considering this definition from the point of view of psycho-analysis the author enquires first what conclusions may be drawn from it in the light of our knowledge and secondly how far it is possible to extend it without losing sight of its meaning and intention as a practical definition.

In psycho-analysis the mental capacity of the individual for adaptation is seen in relation to such problems as the development of the reality-principle, the subordination of the pleasure-principle, the necessity to make changes in the love-objects, the advance from narcissism, the choice of career, the loss of love-objects and so on. Can we say that the individual who resolves these problems satisfactorily is intelligent and that he who cannot adapt himself to the demands of life (in the sphere of love, perhaps), is unintelligent? (In scientific discussions it is always necessary to take the sphere of love deliberately into consideration if it is not to be overlooked.) This conclusion is obviously false; inability to attain the average degree of adaptation to disappointments or privations (as in morbid grief) or inability to advance to full normal development (as in sexual perversions) or neurosis itself, are conditions certainly not necessarily accompanied by lack of intelligence. On the contrary, such persons are frequently of high general mental capacity.

Since intelligence is not opposed to the disposition to neurosis the author submits that it may be regarded as a 'complementary-function,' a partial component of the general capacity for adaptation, not the whole capacity. The *Libido*-impulses make use of other means of adaptation than conscious thought-processes. Thought as a means of adaptation is only applied where the 'interests' of the person are involved (in general psychology regarded as a question of 'attention'); it follows that all that which is outside the interests of the Ego falls outside the region of the intelligence, although those interests which are sublimated forms of libidinous impulses again fall within this domain. The range of interests varies considerably in different individuals; interests are acquired as the conscious personality is acquired, as the *result* of an achieved adaptation to reality. Thus there can, strictly, be no intelligence present until after some interests in reality have been acquired. Broadly, the wider the range of interests the more intelligent the person, that is, the more capable

of adaptation *was* he at an earlier stage. The author then goes into the question of affective influences upon thought and shows that thought as a means of adaptation is secondary or subsequent to affective influences. From the phenomenon of 'suggestibility' he infers that the intelligence can achieve a special condition of adaptation (in this case a submission to the will of another) which is to be distinguished from the capacity for general adaptation to life as a whole; thus it constitutes a special-capacity, besides being a complementary-capacity.

At this point the author proceeds to consider adaptation by means of thought more closely and shows that it occurs in two ways. It comprises, first, the response within to reality without—wishes, strivings, actions concerning the objective world of reality—and secondly it consists in an assimilation of outer reality into a part of the thought-content. The first he calls 'personal' adaptation, the second 'adaptation by means of thought-content' (*inhaltliche Anpassung*). In personal adaptation we are subordinated to the outer world, but in adaptation by means of thought-content we conquer a part of the outer world, understand it and make laws for it. Thus we gain an adaptation, not merely to the actual objective world of reality, but also to that other objective world, the world of truth, of values. Now adaptation by means of thought-content can be qualitatively differentiated; it can occur up to varying degrees of 'depth,' as Hermann calls it, according to the degree of assimilation and harmony it achieves in the whole personality. When the thought-content is assimilated to a certain 'depth' it results in a new inner harmony which he calls 'Depth of Thought.' In this category he does not include personal judgments, nor those thoughts which are the expression of deep feelings.

Looking round for evidence of the existence of such 'Depth of Thought' he points to universal experience in acquiring certain kinds of new and important knowledge. It is the experience, for instance, of every child mastering facts of common knowledge in everyday life. Their truth is borne in upon him and becomes 'depth of thought' in him. The intellectual effect of such a thought is even more remarkable. It becomes a nucleus, a stable foothold, as it were, in adaptation. Freud says, "there are different ways of knowing which are not of equal value....It is true that symptoms disappear when their meaning is understood, but the understanding must be founded upon an inner change in the patient which can only come about by a mental effort directed to that end." Again, "Conviction is not so easily acquired, and if so, it soon proves worthless and unstable." Depth of thought is the substance of every useful conviction, of all effective knowledge. That there are two ways of knowing points to the conclusion that a certain element of time is required in 'deepening' thought. It takes time for the thoughts of a genius to mature and for the world to assimilate them. But time is the external factor; the internal factor is the *resistance* to new thoughts with which psycho-analysis has familiarised us. A struggle arises between the adaptation to reality already existing and the new problem requiring further adaptation. It is clear that this conflict leads to repression and regression, as in the case of *Libido*-conflicts, and that the regression takes the form of earlier phases in the development of the reality-principle, as described by Ferenczi. By means of the primitive (unconscious) belief in magic the new recognition sinks to the deepest levels of the personality. Discoveries in science are characterised by 'depth of thought' and are now recognised as emerging from below the level of consciousness. The deepest thoughts have a 'magic' character even in their

content, that is, they conform to the primitive level of thought although they constitute an adaptation to reality. The author instances the Einstein theory of the relativity of time as closely corresponding to the inappreciation of time found in young children and to the effect of emotional influences upon the appreciation of time in all human beings.

After this attempt to indicate the special qualities of 'depth of thought' the author goes on to relate the conception to the conception of intelligence already arrived at. The capacity for an average degree of depth of thought and the capacity to absorb new ideas to a certain depth must be included in the definition of intelligence, together with that aspect of it which is equivalent to a wide range of interest and a capacity to adapt to new demands in the field of interests. This definition would then run: Intelligence is a special-capacity, a complementary-function and a partial component of the general mental capacity for adaptation. The partial component may be sub-divided into four more or less independent minor capacities, as follows: The existing breadth of intelligence and the capacity to adaptation in and to this region, forming the 'personal' form of adaptation, and the existing average depth of thought and the capacity to deepen thought, forming the capacity for "adaptation by means of thought-content."

The author concludes by pointing out that the capacity to estimate depth of thought in others and to assimilate such thought is dependent to some extent on the affective situation—a certain willingness and a mutual transference of feeling seems to be a necessary preliminary condition. (He remarks pointedly enough that the insane show no depth of thought, no appreciation of truth and no capacity to transfer feeling.) This necessary condition points out the remaining complementary-function of adaptation, namely, the capacity for adaptation in the region of the *Libido*-impulses, which must be at least equal to the intelligence in importance as a means of adaptation in life.

As a speculative contribution to a subject as yet almost ignored by psycho-analytic investigators, Hermann's suggestions have very great interest, more especially in that his enquiry concerns the functions and mechanisms of the reality-principle, since from the outset the exploration of the hitherto unknown and unsuspected pleasure-principle has been the chief concern of psycho-analysis. The nature of the pleasure-principle, and even the fact of its existence, is sufficiently new and puzzling to most psychologists to engage their capacity for adaptation to the full, but to those who have assimilated its truth up to a certain 'depth' the reality-principle appeals as a new field of fascinating possibilities in the direction of acquiring new knowledge. Even in development the reality-principle is secondary and complementary to the pleasure-principle; the failure of academic psychology hitherto to account satisfactorily for adaptation on intellectual and conscious lines and the negative results of its efforts to bring the 'instincts' into some relation with the more conscious aspects of personality illustrate the necessity for a comprehension of the deeper and less conscious aspects before any adequate exploration of the upper levels of the mind can be satisfactorily attempted.

It is perhaps unavoidable that any attempt to consider the reality-principle should give an impression of underestimating the pleasure-principle, although in its present suggestive form Hermann's theories can hardly be justifiably so criticised; nevertheless experience shows that the human tendency to over-rate intelligence is so strong that any support which it may receive from science is to be accepted with due caution.



Reik is a writer whose work on the application of psycho-analysis to the study of religion, and its origin and development, is well known. His interests incline towards group-psychology rather than individual psychology; in an article in this number called "A Case of Collective Forgetting" he makes an attempt to show, by analysing a small occurrence of a fairly common type, a connexion between collective and individual psychological reactions.

On the occasion in question, four people were unable to remember the name of a book which they all knew quite well. A lady in the course of a discussion referred to the book, but could not recall its name, and then three men among the company were similarly afflicted. At her request Reik made an analysis of the point with the lady which at once revealed associations with repressed complexes, adequately accounting for her inhibition. He goes on to show how the 'sympathetic' reaction of the three men, who were clearly 'infected' with her forgetfulness, was due to an unconscious recognition and response on their part to the unconscious impulses in her which caused her symptom. The exhibitionistic-, prostitution- and curiosity-phantasies which proved to be unconsciously associated in her mind with the book—not merely with its content but by a clang-association with its title—had roused, he thinks, the aggressive-, exhibitionistic-tendencies in the men and resulted in a repression in them corresponding to hers.

Reik finds in the incident support for two conclusions; first, that human beings possess other means, besides those of *conscious* thought and action, for communication with one another: that is, that the unconscious regions of one mind have their own means of comprehending and communicating with the unconscious regions of other minds. Secondly, that at a certain stage of civilisation repression is universally operative, maintaining the common primary impulses and their derivatives at an unconscious level in all individuals. These would seem to be two obvious truths, self-evident to the plain man. The ability to comprehend and to respond to what is passing below the surface in another mind is what is popularly called 'intuition' or 'tact,' a faculty which certainly operates most successfully when the content of the intuition, or the purpose of the 'tact,' is quite unconscious. And the most cursory consideration of civilised life shows that repression of the primary instincts is operative in all individuals, for the obvious reason that all are subject to the same hereditary and environmental influences.

But although we may recognise these truths, a scientific psychological explanation of how and why they come to be so is desirable and Reik's contribution does not appear to assist very greatly in this respect. He infers, no doubt quite rightly, that complexes were stimulated in the men in response to their unconscious recognition of complexes active in the lady, which, owing to repression, resulted in their manifesting a symptom similar to hers. The author refers to Freud's work upon the *Zote* (obscene joke) showing that such a joke is a refined exposure of, or sexual assault upon, another person, originally a woman, involving the aggressive-exhibitionistic-complexes; but although it may well be that a similar psychological process was at work in this instance there is nothing to explain how the stimulation of that particular complex arose in the men here, for there was nothing obscene or sexual in the discussion.

In any case, Reik does not go into the question as to how this inner comprehension in one mind of another mind proceeds, which is certainly a question of great interest, one which, if it could be explained, would throw much light on so-called 'telepathic' occurrences and on the problem of 'suggestibility'.

among numbers. He does not omit to lay stress on the importance of manner and expression, etc. in conveying unconscious signs. One would like to know, though, how far such signs can convey any indication of the *specific* nature of the complexes involved, over and above the more 'functional' material, the degree of repression or otherwise of some complex unknown. No doubt this question is one of those which, as Freud says, depend upon the varying degrees in all the various factors at work, so that each case would require a separate estimation and judgment. Reik points out, and it is a conclusion which often comes upon one in analytic work, that owing to the same impulses being common to everyone coincidences in their activation must very frequently occur. It is certain that the contents of a popular book would be capable of being associated, probably in many ways, with the primary tendencies in the mind of every reader; the question in this instance is, did or did not the onlookers unconsciously know that the exhibitionistic-prostitution-complex was behind the lady's inhibition, and if so, how? and if not, how did the corresponding complex come to be aroused in them? But the probability is that they did know! for the title of the book which they all knew and forgot was "Ben-Hur," a word foreign to the Viennese but almost identical in sound and spelling with two Viennese words meaning—"I am a prostitute" (*Bin Hure*).

Reik concludes by mentioning that a widespread capacity to forget unpleasant ideas or groups of ideas is an established phenomenon in race-psychology, particularly in primitive races, and refers to Freud's "Totem and Taboo." He remarks that although much has yet to be done in explanation of mass-psychology, it is already clear enough that the same forces are at work, in the individual and in the race, in the course of one life or through a succession of countless generations, bringing about forgetfulness and memory, repression and the return of the repressed.

"Wish-fulfilments in Earthly and Divine Punishments" is a heading under which Groddeck has collected a great deal of material. He writes in a most vivid, terse style, plunging straight into his analytic interpretations, which deal mostly with phantasies of punishment, and he links some of these up with different types of punishment performed in reality by man upon his fellows.

Life after death is a fruitful subject for phantasy. So strong is the lust, and the sly cunning, of the Unconscious that even the idea of eternal punishment is a distorted form of eternal joy. By the close relation of love and death, the fire of desire which runs through the whole of human existence is projected even beyond the grave; belief in Hell and the Devil is an expression of the insatiable unconscious craving for pleasure. In speech, in myth, in custom, fire stands for love; hell-fire represents the wish to prolong the moment of passion through eternity. The dark, moist cavern of hell, in which fire burns, is the female organ; the devil, with hoofs, horns, tail and pitchfork is the phallus; the boiling oil in which the damned seethe is the seminal fluid. Death and the grave signify the return to the mother's womb; being devoured by worms symbolises birth (worm = child). Cremation can mean purification by fire, an abbreviated form of the punishments of hell and purgatory, or an attempt by a voluntary penance to escape torture, or by the scattering of the ashes to evade the resurrection of the body.

Individual analyses furnish special conceptions of tortures hereafter. A young girl imagined the nipples of her breasts being eternally pinched with red-hot pincers. This proved to be a talion punishment for an infantile form of

sexual wish, in which the female was imagined to bite off a piece of the male organ, which formed the child in her. The 'castration' was to be performed on her, by the biting jaws of the pincers. Castration (the punishment *par excellence* in the unconscious mind) is itself associated with the sexual act (through the loss of erection in the organ after emission); beheading can represent both this punishment and the sexual act itself, the flow of blood being associated with emission and the collapse of the body in death with the resulting flaccidity of the organ. The legends of Salome and John the Baptist, of Judith and Holofernes show this clearly; in David and Goliath, both figures represent the male organ, in its two forms, large and small. Popular excitement over executions, tales of atrocities in war, burning of houses, cutting off the breasts of women, and so-on, are due to these associations.

Another female patient had the idea that in hell the devil would hammer a thick wooden stake into her genitals, or that she would be torn into four pieces by four stallions. Both were formed from experiences of a sexual kind in which parting the legs was the main feature. A similar idea was met with in another young girl, namely, that the devil would hack at the genitals with a chopper, or hounds with fiery tongues would lick them, while she lay with legs wide-stretched upon a block. This was traced to a past experience connected with a chopping-block and a dog. The phantasy of riding naked on a razor in hell, in another patient, was traced to experiences of a sexual nature from *behind*, and to envy of a brother's organ. The phantasy of being pierced by a red-hot stake and roasted, and the medieval tortures of roasting and staking are symbolic of the sexual act.

The author then goes more closely into the devil as a symbol. The devil is frequently supposed to be black; this is also a common attribute of those burglars and murderers (and bogies) who are suspected to be under beds and behind curtains. The expectation of sexual violence—which Groddeck says is the only demonstration which is ever accounted a genuine proof of love by a woman!—is at the root of the fascination which savages in travelling circuses have for women, and is behind the dread of the native troops during the late war. Black stands for night, darkness and excitement; white for day-light and respectability. Besides this, the devil is frequently represented as brown, not black, and this leads to another group of associations. In one case of a female patient, eternal punishment took the form of the devil inserting a stake into the rectum and twisting it for ever there; analysis clearly showed that the agony caused by the devil and his stake was but a projection into eternity of pleasurable sensations caused by the faeces pressing into and being retained in the anal canal. Results of analyses make clear that besides symbolising the male organ, the brown stinking devil also represents the stool, the importance of which as an instrument of pleasure Groddeck finds still under-estimated, in spite of the work on anal-erotism already done. He says it is a form of pleasure which humanity learns to enjoy earlier and makes more use of and retains later, than the genital,—even to the moment of death. Self-gratification has here its source and earliest form, not merely in a particular class of persons called anal-erotics, but in the whole human race; the gratification obtained is so habitual that it is hardly perceived in consciousness. But experiment and attention bring proof to anyone of the reality of anal-erotic pleasure and also make conviction easier in regard to such problems as infantile birth-theories, the money-complex, paederastia, and 'castration'-ideas (which spring originally from the experience of parting with the faeces).

Groddeck finds that suicide-phantasies are always in closest symbolic

association with the predominating sexual desire. Thus with men, shooting and hanging are the commonest forms of it, representing ejaculation and loss of erection in the trap which symbolises the woman. With women, poisoning and drowning, signifying impregnation or giving birth, and falling from a height, meaning a sexual, moral fall, are commonest. The wish-fulfilment in the idea of re-incarnation is obvious enough; further, the fear of being reborn in some distasteful shape, of the other sex, or in animal form, is founded on a wish. Animals are permitted self-gratification without reproach, and so also are the insane; the author finds that terror of madness has reference to wishes of this kind. Many interesting details of cases illustrating all these points are given.

We can only endorse the author's conclusions, both as regards the enormous influence of the unconscious tendency towards gratification, upon both life and phantasy, and the interpretation of the particular manifestations discussed. Especially in regard to the faecal significance of black and brown-coloured love-objects, two cases in the writer's experience fully confirm Groddeck's conclusions. It is worth noting that the contempt felt for 'coloured' races is without doubt derived from this source, contempt being a characteristic reaction to anal-interests. This cannot be unconnected with the dread of savage licence and of madness, the humiliations involved being dreaded partly as *punishments* (madness as a consequence of masturbation, for instance) and partly as *fulfilments* of repressed *wishes*.

Engenia Sokolnicka contributes an extremely interesting account of a cure of an obsessional neurosis, in a boy of 11½, in the short space of six weeks. As the author herself makes clear, a complete and true analysis was not possible; it was to some extent modified by educative and disciplinary suggestions based on analytic comprehension of the case.

The child was extremely ill, quite unable to attend school or learn, almost unable to collect his thoughts at all or attend to anything; his whole life was dominated by compulsive ceremonies, which also involved his mother's whole time and attention. He was half-starved, for every mouthful of food occasioned the most terrible doubt and anxiety and required the most elaborate precautions and performances. This applied also to all the other everyday requirements of ordinary life. Besides this, the boy frequently lost consciousness and became very violent, biting, kicking and tearing the mother and her clothes, until he would fall at last sobbing and exhausted into a chair. These attacks had given rise to a suspicion of epilepsy. Apart from this, the child was exceedingly good and sweet-tempered, dutiful, scrupulously honourable and truthful; in fact, too good.

Sokolnicka gives a most attractive account of the skilful way in which she dealt with this difficult case in such a short time, and a most vivid picture of the psychological situation in the child's mind. The little obsessions and compulsions are so easily interpreted and the childish terror and mental agony so monstrous that the story gives, as it were, a flashlight exposure of the Unconscious, bringing a conviction of the reality of these dark psycho-analytic truths, seldom received with such simplicity and completeness in analyses of more complicated cases. We see the exciting sexual thoughts and wishes almost in the bare crudity of their childish forms; the struggle to fight them goes on almost before our eyes, and we perceive almost actually the awful burden of repression enveloping the child. The love for the mother, belief in



magic, sexual curiosity, onanistic impulses, the terror of the forbidden, make up this tale—these are the hidden causes which underlie the disease. This little account should go far to convince any doubters of the overwhelming significance of the sex-life for every individual.

Freud's preface to the fourth edition of the "Three Contributions to Sexual-Theory" is printed here. It deals with the opposition which this volume above all his other works has always met with. He says that although the psycho-analytic theories in regard to the Unconscious, repression, conflict, the mechanisms of symptom-formation and so on, have been more widely accepted he sees no reason to believe that the doctrines laid down in this book are less well-founded on careful and unprejudiced research than any others. Moreover, the explanation of the opposition lies so close to hand. So many doctors have not the patience or the experience necessary for finding out these truths for themselves in prolonged analyses, or else the requirements of a quick cure make it impossible; and doctors who do not practise analysis are not in a position to form an opinion about that which only analysis can reveal. If mankind understood how to learn these things from the direct observation of children the "Three Contributions" need never have been written.

Again, the emphasis in this book on the significance of the sexual element in every department of life has led to an exaggeration of the idea, so that the nonsensical reproach is now common, that psycho-analysis explains 'everything' by sex. And yet Schopenhauer had previously shown clearly enough the extent to which sexuality—in the usual narrow sense—influences the life and deeds of mankind. As for the broader sense of the word sexuality, which includes those impulses which are found in children and in perverts, those who regard psycho-analysis with contempt are reminded that the divine Plato called it—*Eros*.

Under the title "Autistic Thinking in Children," Markusiewicz describes two cases in which phantasy-construction proved useful in enabling the subject to deal with difficulties in life. The process is compared with the delusions of the insane. Sachs gives eight instructive notes of observations made in the course of analytic practice. Hitschmanu contributes a note insisting on the importance of urethral-erotism in the obsessional-neurosis, ranking it equal to the anal-sadistic partial impulses. He relates the common compulsive washing symptom to this impulse, by the equivalence of water and urine. The question has to be considered whether the prevalence of urethral-erotism and its importance in this disease are constitutional, as with the anal-sadistic impulses, or whether it plays a more symptomatic part. Grüninger reviews the subject of "Psycho-Technique and Psycho-Analysis," remarking that the decay of academic experimental psychology appears to be leading towards the study of the psycho-physical 'conditions of work.' In this field, probably more work has been done in this country than abroad. The author dwells upon the difficulty of testing the affective factor and regrets that 'psycho-technique' works upon the assumption of a stable emotional factor, which is actually very rarely present. Flournoy contributes a note on the symbolism of the key, with some drawings by an insane patient, and some general remarks upon symbolism. There follow, in conclusion, reviews of twenty books.

JOAN RIVIERE.

## REVIEWS.

*Collected Papers on the Psychology of Phantasy.* By DR CONSTANCE E. LONG.  
Baillière, Tindall & Cox, 1920. pp. xii + 216.

This volume, composed of papers which have been read before various societies between the years 1916 and 1920, presents the analytical standpoint of a sane and observant mind. The book is singularly free from fanaticism and the style is simple and unforced. The meaning of analysis is perhaps brought home to the lay reader more humanly, naturally and convincingly in this book than in any other volume of its kind. The illustrations are drawn from many sources, the psychology of the child being particularly referred to. The significance of analytical psychology in its practical application to human affairs is to Dr Long a matter that is intimately bound up with many of the problems existing to-day in Western civilisation. She emphasises the need for the unconscious as being one of the most important factors behind modern unrest. In conjunction with other observers she finds that the problem of man does not only lie in a satisfactory adaptation or relationship to objective reality, but also in a satisfactory relationship to the unconscious. From this point of view, man stands between two worlds; the world of the unconscious and the world of reality. Neurosis results from a failure of adaptation in one direction, or in the other direction; or in both directions. Dr Long associates herself with the Freudian interpretations up to a certain point. She finds, however, that the unconscious is more than an infantile wish-fulfilling apparatus produced by repression. In the unconscious lie the under-expressed elements of the psyche. When the psychology is one-sided in its conscious manifestation the other sides, or missing psychological functions, are found to lie towards the unconscious. Neurosis, therefore, to Dr Long, is not merely a question of partial failure of repression, and psychic health does not rest on a basis of repression. Neurosis is the result of a one-sided psychological development, and psychic health is a matter of growth. Neurosis is psychological mal-development. Such a view gives to the unconscious a considerably wider significance than that attributed to it by the followers of Freud. The over-development of one particular psychological function, such as the intellect, leads to a disproportion in the psyche as a whole, and to the non-expression of other human functions that should be developed for a normal and harmonious life. In such a case, the feelings lie towards the unconscious and appear therefore in the products of the unconscious, namely, in the phantasies and dreams. Viewed from this standpoint, the products of the unconscious appear to Dr Long as giving valuable indications of the direction along which the life-line of psychological health should be developed, even although that may involve a partial sacrifice of the most valuable and most fully-developed function. It is in this sense that the dream becomes *compensatory*. Dr Long points out that the compensatory theory of the unconscious mind is perhaps one of Jung's most valuable ideas. The wish-fulfilment theory of dreams narrows the possibility of interpretation, so that monotony results. The reaction to this monotony is frequently interpreted as resistance, but it is question-

able whether this interpretation is always justifiable. A theory that gives a causal explanation only to human psychology, as a whole will naturally meet with opposition, which need not be regarded as pathological. On the other hand, Dr Long emphasises the importance of the work of Freud, whom she regards as one of the immortals, and points out the danger of excluding the sexual interpretations. She seems to incline to the view that a reductive sexual-objective analysis, carried to its extreme, produces a profound pessimism, which few can support with equanimity. To many the weight of the past becomes too overwhelming, as the principle of determinism is relentlessly developed to the exclusion of all possibilities of individual creative effort. This may prove to be an actual difficulty in the reductive technique, where the possibility of a prospective function of the unconscious must necessarily be neglected. Dr Long rejects the idea of the censor as defined by Freud as a real explanation of symbolism. She finds the conception of the censor a useful one, but she believes that Freud's lasting fame will not rest on either the retention or the overthrow of his theory of the censor. The wish-fulfilment aspect of the unconscious she accepts, but does not find the dream to be a result of the conflict between the wish-fulfilling unconscious and the censor. While for Freud the dream in its essence is a veil for repressed desires which are in conflict with the ideal personality, she finds herself in agreement with Jung when he observes that "the dream is in the first instance a subliminal picture of the psychological waking state of the individual." Instead of being only the fulfilment of a disguised wish, it is a universal means of primitive expression.

She finds natural danger in the tendency to give the dream symbols a more or less fixed value. "If it is decided *a priori* that practically all ideas symbolised are sexual, no other ideas will be sought or tolerated." A prolonged reductive analysis tends to make the patient jump to stereotyped conclusions concerning his dreams, so that the value of the symbol, and the whole idea of symbolism, becomes artificially contracted. The question of the objective and the subjective interpretation of the dream is discussed. The Zurich school has given the subjective interpretation of the unconscious material as an important contribution to the analytical work. In the subjective interpretation "all the rôles played by the people or things in the dream are regarded as expressions or tendencies or attitudes or views of the dreamer.... Both kinds of interpretation are valid. The one is analytical and leads down into the depths of the impulsive life. The other is synthetic and brings back from the depths the raw materials for the purpose of constructive life. This two-fold interpretation fits into the general scheme of life, because adaptation is itself two-fold, *viz.* to the inner subjective world of archaic reality and to the outer objective world of material reality."

Dr Long lays especial stress upon the value of phantasy. She quotes from Jung's book on psychological types (which is at present being translated into English): "Fantasy is the creative activity which gives birth to the answers to all questions admitting of answers. It is the mother of all possibilities, in which the inner and the outer world are united in a living whole. It was, and always is, phantasy which builds the bridge between the irreconcilable claims of the object and of the subject, of extraversion and introversion. In phantasy alone are both processes united.... What great thing has there ever been that was not phantasy first?... Every happy idea and every creative act had its beginning in imagination and in what we are accustomed to call childish

phantasy.... The dynamic phases of phantasy lie in its playfulness, which is suitable to childhood and thus appears irreconcilable with serious work. Yet without this play of phantasy no creative work has ever seen life."

Phantasies, as a synthetic function, contain only the potential value. As phantasies alone, they remain worthless. Through a selective discrimination the valuable elements in the raw material can be led forward into a real application. Phantasies are both good and bad, but to reduce phantasies always to a sexual basis is to destroy the prospective or creative side that they contain. Dr Long finds in the unconscious a forward-reaching or prospective movement—what might be called an evolutionary impulse—which aims at the extension and development of the individuality and seeks to overthrow the regressive and fixed elements in the psychology. She shows that this movement towards individuation has much to do with the theme of re-birth, which recurs frequently in the dream material, and to which has been given too exclusively the interpretation of concrete incest. Such themes as the re-birth theme originate in a part of the unconscious that cannot be called personal. Dr Long, as has been already said, does not hold the view that the unconscious is produced only by repression in early life. To her the unconscious is pre-existent to the conscious mind. This part of the unconscious is related to the brain in so far as it is "an ancestral inheritance, and possesses the pre-formed instincts and archetypes of apprehension, which are present as potentialities of future thought and feeling. As consciousness emerges out of unconsciousness the mind climbs up the genealogical tree as the body has done, that is, its function becomes more and more differentiated." In connection with this idea she quotes a phrase of Jung's to the effect that the intellect is born out of mythology. "As the child develops consciousness and his experience accumulates, the *personal unconscious* begins to come into existence.... In this view the personal unconscious is regarded as the acquisition of the individual's life, and is differentiated from the impersonal unconscious, which is an historical inheritance." She illustrates by giving an example of a dream concerning a dragon, pointing out that the dragon is a mythological image belonging to the impersonal unconscious. She gives many illustrations of the symbolism of the infantile personality in dreams, and the myths that are found in the unconscious concerning the fate of this element. Such interpretations are, of course, incompatible with the conception of the unconscious as being an infantile wish-fulfilment apparatus. Dr Long's work is extremely valuable. It is impossible to give a detailed discussion of each paper; the material is abundant and rich, and many excellent psychological portraits are drawn. Throughout the book there is a serenity and balance that is refreshing in these days of over-intellectualised or over-rationalised analytic publications.

MAURICE NICOLL.

*Psychology and Psychotherapy.* By WILLIAM BROWN, M.A. (Oxon.), D.Sc. (Lond.), Reader in Psychology in the University of London, etc. London: Edward Arnold, pp. xi + 196. 8s. 6d. net.

To those who have followed Dr Brown's contributions to the literature of the war neuroses, this book will be in large part familiar. In fact there is not a great deal which has not already been published. For all that the volume should be one of great value, and that for a number of reasons.



In the first place the author maintains an admirable attitude of independence in regard to the numerous theories of modern neurologists and psychopathologists. Freud and Jung, Déjérine and Babinski are all submitted to criticism which is sufficiently detached to be at least uncommon in these days of scientific partisanship. The true Freudian will no doubt be the most incensed, not only by the somewhat cavalier attitude which the author adopts towards the Freudian theory, but also by the use of the term psycho-analysis in a sense that is far from Freudian. In one passage for instance (p. 161) it is used as synonymous to autognosis. Now autognosis is a term coined by Dr Brown himself for a therapeutic measure that is certainly not identical with psycho-analysis. Furthermore, criticism is bound to be elicited from the Freudian ranks by Dr Brown's persistence in associating the phenomenon and theory of abreaction with Freud. As far as the theory of abreaction goes Freud—if my information is correct—discarded it some years ago, just as he discarded hypnotic analysis.

In the second place this book should prove very helpful to practical psychotherapists for its statement of the various theories of the psychoneuroses. Considering the size of the book this section is most adequately and, as we have already said, impartially carried out. Of the multitude of books on psychopathology which have appeared in recent years, too many offer a theoretical explanation which is one-sided as well as dogmatic. The atmosphere of the psychological lecture room is quite useful in this section.

In the third place the book cannot fail to possess a distinctive value as a record of the war work of one of the few psychotherapists who, by reason of opportunity, skill and personality, "made good" during the war. But the discerning reader will not fail to recognise that the unquestioned success which attended Dr Brown's work at an advanced neurological centre during the war was due in far greater degree to affective therapeutic measures than to any procedure that could be described as analytical.

Part IV is devoted to "Lessons of the War." It occupies a quarter of the book and throughout it we constantly run across phrases such as "enthusiastic confidence in his doctor," "expectation of a complete recovery" (p. 132) and so on. Now the combination of affective and analytical methods must always remain at the very heart of the problem which the psychotherapist has to face. Both schools of analysts have recently adopted an attitude less uncompromising than their original one upon this point. Those who stand outside these two schools have always recognised frankly that suggestion in one form or another must have a place among our psychotherapeutic methods. It certainly has a very large place in Dr Brown's method, and though he is careful never to use the word "hypnosis" without the epithet "light" we must frankly confess that we are not greatly illuminated by all that he says on the subject. We see clearly that Dr Brown blended—some would say "mixed up"—affective and analytical methods with admirable results in practice, but he does not convey to us what we really do want to know above all things, and that is what criteria of mentality, symptoms or history does he associate with his use of analytical methods and affective methods. We find for instance on p. 131 the following statement: "For insomnia suggestion treatment at night is often very efficacious." No one will have any difficulty in accepting this statement, but would Dr Brown have us believe that the treatment of this one symptom by suggestion may be carried out without compromising in any way the prospects of a cure by analytical methods? Or again, do all these

patients whose insomnia Dr Brown treated successfully by suggestion come under the heading of hysterics? For we read on p. 126, "I agree entirely with Pierre Janet that only hysterical patients can be hypnotised." This is an ancient generalisation which has been controverted again and again by the most reputable psychotherapists who use hypnotic suggestion. Quite apart from the therapeutic value of hypnotism, no good can be done by making such a claim. If Dr Brown had said that he and Pierre Janet could only hypnotise hysterical patients, the critic might have been astonished, but could not have dissented.

Again, we should like to ask with all due respect what—if anything—is meant by the phrase on p. 119, "The mechanical processes of auto- and hetero-suggestion"? And again, what is a "worry complex" (p. 77)? Surely this is the sort of useless phrase that we might expect an academic psychologist of Dr Brown's standing to avoid.

But these after all are minor points. If we were asked to make a general criticism of Dr Brown's system of psychotherapy, as described in this book, we should say that the author leaves us with the impression of having very successfully and very opportunely dealt with psychoneurotic breakdown in a vast number of cases. He appears to have obliterated symptoms most triumphantly; and that, no doubt, was what he was called on to do in his war work. But the business of psychotherapy in daily life makes a wider demand than this. We have to enable our patients to readjust their passions and desires so that a state of harmony both internal and external may be set up with some prospect of persistence. Dr Brown enumerates his four methods, which are psycho-synthesis, psycho-catharsis, autognosis and the personal influence of the physician. Of these only autognosis refers to the problem of readjustment. The two first have to do with re-association and the last is what the analysts call transference and the older hypnotists call rapport. It is with respect to autognosis that we feel some misgivings. The "long conversations" which appear to constitute its technique sound a trifle vague, and the patient's problem in life, apart from his immediate symptoms, appears to receive secondary consideration. But this may only be an impression which fuller knowledge of Dr Brown's methods in civilian and peace time work would dispel.

Finally the volume is one that every open-minded psychotherapist should read with great care, for though he may differ from many of Dr Brown's views he will not fail to profit from the account of the author's work in France, nor will he fail to be stimulated to fresh reflection on many problems by the lucid statement of the various theories which are current to-day.

H. CRICHTON MILLER.

*A Young Girl's Diary.* Prefaced with a letter by SIGMUND FREUD. Translated from the German by EDEN and CEDAR PAUL. London: George Allen and Unwins, Ltd., 1921. Price, 12s. 6d. net.<sup>1</sup>

The publishers are, I think, to be congratulated upon their boldness in issuing this volume. It tells, in her own colloquial phrases, how an Austrian girl acquired, during the years of puberty, a knowledge, more or less exact,

<sup>1</sup> The publishers wish it to be stated that the sale of this book is restricted to such members of the educational, medical, and legal professions as are interested in psychology.

of the chief biological facts of sex and family life. The book is at once autobiographical and anonymous. Unfortunately, the only information which the preface offers about the author is that she was "a young girl belonging to the upper middle class," writing, we gather, somewhere between the years 1900 and 1915. Much is thus left obscure. Her health, her ability, and her character, whether she was of a supernormal intellect, or of an abnormal temperament and disposition, these are circumstances that we are left to piece together from the style and statements of the diary itself; even the editor refrains from signing her name and from recording her scientific credentials. For such regrettable omissions diarist and editor (if, indeed, they are distinct individuals) are perhaps less to blame than the general attitude of the lay public towards explicit revelations and discussions, however innocent in their ultimate intention, of sex and sexual interests.

With all its shortcomings, however, the book still forms a valuable and suggestive document. To those who, whether teachers, physicians, or psychologists, happen already to have become acquainted with the inner mental life of one or two active and intelligent girls during the years of early adolescence, the pages that relate specifically to sexual physiology will bring little that is fresh or unfamiliar. The shocks, the conflicts, the secret experiences, the preposterous inferences and yet more preposterous gossip picked up from maid-servants and school-fellows as misinformed as they are unscrupulous, these are vividly illustrated upon almost every page; but they are, or should be, by no means new to the psychologist of childhood. On the other hand, the reaction of such incidents upon the child's mind, the mode in which (as Freud puts it in his preface) "the mystery of sexual life first presses itself vaguely upon the attention, and then takes entire possession of the growing intelligence, so that the child suffers under the load of hidden knowledge, but gradually becomes enabled to bear the burden," above all, the subtler changes so induced in the child's personal attitude towards her father and mother, her brother and sister, her school masters and school mistresses, and her boy and girl acquaintances, all this is poignantly suggested. In particular, it is intensely instructive to watch the processes of suppression, repression, and complex-formation actually in operation, as it were, beneath our very eyes.

This being so, it is singularly unfortunate that we have no means for deciding how far the experiences recorded are really typical of the average child at school. In the publisher's note it is stated that the book is "not a work of fiction," but the "genuine and unedited diary of a young girl"; and it is added that "innumerable such diaries are probably written." Those who have made a scientific study of the mental processes and literary expression of school children will feel immediately that either one or the other of these statements must be untrue. Either the writing is the writing of an older person, or the child is a child of unusual ability and abnormal singleness of purpose. To the reflecting reader the earlier pages appear at first sight to be the composition, not of a girl of eleven or twelve, but of an older person deliberately recalling, as far as possible *verbatim*, her earlier thoughts and mental comments upon one exclusive problem. If this impression is wrong, and if these things were really written on the days on which they occurred, then we must conclude that the young girl possesses a fluency of writing and a power of explicit logical discussion that can be claimed by probably not one in five thousand children of the same age; and that the unity of interest with which, day after day and year after year, she keeps to the same central issue through almost every page



and every entry of the diary is tantamount to a pathological obsession. It is to be noted, however, that the editor, in her preface, claims merely that nothing has been added or subtracted from the author's own narrative; she does not claim that the dates of the entries are true: and thus her assurances are quite consistent with the view that the writer, relying upon a vivid verbal memory or perhaps upon contemporary notes, has thrown her childish recollections retrospectively into diary form.

Encouraged, no doubt, by the popularity attained by such writings as those of Daisy Ashford and Opal Whiteley, so many publications, purporting to give the unaided work of young children, have recently been issued, that it is perhaps worth while to labour this particular criticism. To cast a work of fiction into an autobiographical form, and to change names and dates from genuine autobiographies in a way that is utterly bewildering to the scientific student, has always been regarded by the man of letters and the man of business as a legitimate literary device; while members of the general public, unaware of such conventions, are apt to take the *Book of Job* and Rider Haggard's *She* at their face value as narratives, equally authentic, of literal and absolute fact. I may, therefore, in some detail enumerate the chief reasons, which make it difficult to be quite sure that the present diary was set down, by a child so young as is implied, at the actual time of the events recorded.

(1) The diary is begun before the age of eleven, and continued throughout the next three-and-a-half years. During that short period the child writes over one hundred thousand words. This is hardly the achievement of an average girl. The writing, too, is done in secret; and the loose leaves are kept private (without any facilities in the earlier years for locking them up) both from an inquisitive sister who shares her room, and from an anxious mother who already harbours suspicions about the girl's letters and thoughts.

(2) Some of the entries for a single day run into five pages of print, nearly two thousand words. Four hundred words an hour is a good speed for a child of this age. But how many would continue at that speed, voluntarily and without discovery, for five hours during a single day? On one occasion the girl copies a letter of four printed pages; this letter has taken her friend four days to write, and takes the diarist herself (judging both by her own statements and by the dates in the diary) three or four days to copy; and yet, within the same week, there are several longer entries, which, seeing that their dates are consecutive, profess each to have been written within a single day. The speed and quantity of writing thus implied is neither consistent with itself, nor with what we know of the powers of the average girl. Further, why trouble to copy the letter? Why was it not as easy to keep the letter secret as to keep the loose-leaf diary secret? We are left to conclude that this was the only device which the writer could adopt for introducing its contents into a publication which was to be, in literary form, a diary and nothing but a diary.

(3) Although much of the phraseology consists of genuine childish idiom and schoolgirl slang, nevertheless, beneath this simple language, there is discernible, even during the first few months, a sustained ability for consecutive logical thinking such as would rarely be found in a child so young. The prolonged arguments against parental views no doubt represent rightly enough the general feelings of the growing girl at this age; but there are very few children of eleven who would have the patience and power to set out every step of the discussion with such logical explicitness. The girl, it is true, attends



a high school (*Lyceum*); and is, indeed, fairly high in her class. But her school records, even when she is putting forward her best efforts, show no signs of such unusual literary genius.

(4) The diary, as a literary work, is extraordinarily coherent and extraordinarily intelligible. Very few diaries, which, like this one, are naturally written only for the eyes of the diarist, would be comprehensible, or even interesting, to a second party. But here every line can be immediately understood. The very first paragraph carefully gives the names, and implies the relations, of the three chief actresses, Rita, the diarist, Dora, her sister, and Hella, Rita's closest friend. Originally, it is true, the diary was written to be shown to Hella; but this seems never actually to have been done; and, even so, the deliberate explanations would not be necessary for so intimate a friend. Lizzi, for example, is introduced; and we are immediately informed that she is Hella's own sister. Later Hella's cousins are named; and the relation is explicitly announced. Children who are scribbling diaries, rapidly and on the sly, do not stop to mention in detail the family relationships of people they have known for years.

Individuals about to play an important part in the drama are nearly always encountered for the first time just before the interesting adventure in which they are concerned takes place, so that the description of each person is fresh in the mind of the reader. The result is that, from the first page to the last, not a single foot-note is required to elucidate the text. Is there a single diary of any young person so self-explanatory?

(5) The internal coherence and dramatic unity of the narrative are no less amazing. There is little or nothing of the bare time-table of events—"yesterday morning I went there...; in the afternoon I came here...; to-day I have done so and so..."—dull and personal trivialities with which young people's diaries are for the most part occupied. School, and the various incidents and personages met with in school life, are occasionally reported in detail; but even these are introduced only as converging upon the big central theme; and, from commencement to close, interest is assiduously sustained from paragraph to paragraph by making the last entry of one day lead up, as a general rule, to the topic of the next.

The book begins appropriately enough with the decision of Rita, and her most intimate school friend, Hella, to start a diary, now that they are entering the high school. Almost immediately the main problem of its pages—the relations of the young writer to her relatives and to persons of the opposite sex—is formulated in her childish way; and the girl then introduces and describes the school mistress who is to have such an influence upon her during the next few years. Then, stage by stage, through the narrative of actual experiences and conversations, Rita gradually analyses and defines her problem; and tells how she acquires and corrects her personal views. A climax is reached when her mother is seized with illness, and eventually dies. The favourite school mistress, who meanwhile had left the school to marry, visits the child again, and comforts her. Rita, having now acquired the knowledge that she wishes, and being thus gravely impressed by her mother's death and by the kindness of her former teacher, at length gives up her previous interest in improprieties; and, finally, as she is preparing for a winter holiday in the hills, loses her other parent. Thus, this self-contained and most significant section of her life comes to a natural close; and, appropriately enough, the diary breaks off.

These four or five peculiar features are, it is true, compatible with an alternative hypothesis, different from that which I have already put forward. It is possible that where the mind (in current phraseology) can draw upon reserves of energy ordinarily locked up in the unconscious, there its performances may rise distinctly above those which are characteristic of the average child under average conditions. A possibility of this sort is suggested by the fact, noted by Dr Kimmins in his recent study of *Children's Dreams*, that the young child's compositions describing his nocturnal dreams (and, I may add, the narratives of older children describing their day-dreams) are, both in quality and quantity, unexpectedly above the average level for English school children at the particular ages studied. Such a conclusion, however, dealing as it does with a marked and exceptional deviation from the normal, needs fuller evidence for its support. And, even so, when the results soar to the sustained level of the present work, it cannot discharge us from the necessity of still considering the author as a genius; for, in the view of some, the very definition of genius consists in the power to draw, to a degree that is denied to most, upon subconscious reservoirs of mental power.

In spite of all these criticisms, I do not wish to imply that the picture which the work gives us of the child's attitude towards these special problems is, in its general character, at all untrustworthy. Internal evidence (which, again, apart from the vague assurances of the editor, is all we have to go upon) is clear in showing that the substance is as genuine as the form is disputable. It is evidently the substance that the editor has considered of greatest interest.

On the other hand, it is the literary form that will interest the special public to whom the book is addressed. The uninformed layman, it is true, may be startled or disturbed to find such notions in a young and girlish mind. But, as every student of child life knows, it is not the harbouring of persistent speculations or perverted views on sex that is at all remarkable: it is their full and logical commitment to paper. Could a child of twelve write so on such a topic? And, if so, could it be intellectually and morally normal?

A word of praise is due to the translators. To discover English equivalents for the original misspellings and colloquial idioms of a German school girl, and yet to preserve the easy and natural flow of the narrative was no easy task; and this task they have performed with singular felicity and skill.

CYRIL BURT.

*Psycho-Analysis and Behaviour*. By ANDRÉ TRIDON. New York: Alfred A. Knopf, 1920; London: Kegan Paul, Trench, Trubner and Co., Ltd. Price, 10s. 6d. Pp. 354.

Whether it is possible to achieve the aim of which the author informs us in the preface to his book—"This is an attempt at interpreting human conduct from the psycho-analytical point of view"—must be a matter of some doubt. Smallish books which attempt to cover vast areas of thought of a profound and complicated nature, and at the same time make a bid for large and popular audiences, are rarely successful: to preserve accuracy in the presentation is almost impossible. The present volume, though containing some useful material, suffers from the same defects as many of the other

works on Psycho-Analysis issuing from America in astonishing numbers. It has attempted to cover far too much ground, for one thing; a glance at the contents-list will show the wide—too wide—range of the book which deals with The Organism, Problems of Childhood, Progress and Regressions, Sleep and Dreams, Problems of Sex, The Psycho-Analytic Treatment, etc. This objection, however, is far less important than the next objection which has reference to the method employed. The whole book is written in a disjointed style, which carries one on in a series of jerks; abbreviated and partial statements, end-conclusions (necessarily appearing quite dogmatic and unbiased, even when accurate in substance), “popular” instances and sayings—all these abound, serving to create an impression on the reader’s mind of hotch-potch and hasty verdicts. Such a treatment involves the writer frequently in inconsistency, even contradiction.

But a far more important feature of the book than anything yet referred to—a feature which goes far to stultify the book as a whole—is the constant occurrence of most misleading and superficial statements concerning matters of vital import. It would seem, indeed, as though the author had pursued the same disastrous policy which he recommends to his readers on p. 271, bidding “all students of Psycho-Analysis to glance at a few books on Hypnotism, to convince themselves of the neurotic character of that practice.” It cannot be too often and too strongly reiterated that “glances” into profound and complex matters are worse than useless—in truth, such glancing tends perilously near to charlatanry. Mr Tridon’s remarkable mis-statements or partial statements (which become almost equivalent to mis-statement) can surely only be due to a lack of mastery of the subject. Take, for instance, this from the chapter on “The Sexual Enlightenment of Children” (p. 68), “Accurate information of a scientific type stops inquiries and day-dreams and vouchsafes to the child’s mind the peace that comes with the securing of evidential facts, satisfactory to one’s reason.” One must ask: Where did the writer obtain this “fact”? Certainly not from study of Freud, Ferenczi, or Ernest Jones—to name the three leading names in the Psycho-Analytic movement: certainly not from the first-hand study of childrens’ or adults’ minds, and equally certainly not from the study of history, religion, or primitive man.

On p. 207 we read: “According to whether the majority of dreams refer to the past, the present, or the future they may reveal a regressive, a static, or a positive tendency.” Again we ask whence does the author derive the idea? Not from Psycho-Analysis assuredly.

These are but two instances of a mass of similar confused statement, cropping up everywhere among much that might be useful and accurate if more fully developed.

BARBARA LOW.

*Dream Psychology.* Psycho-Analysis for Beginners. By Prof. Dr SIGMUND FREUD, author of “Interpretation of Dreams.” Authorised English translation by M. D. EDER. With an Introduction by ANDRÉ TRIDON. The James A. McCann Company, New York, 1920.

This book is noted in these columns, not for review, but for the purpose of warning unsuspecting readers who may imagine that it is what it purports to be—a new book on Dream Psychology by Professor Freud, translated by Dr M. D. Eder.

In actual fact the book is a "pirated" *réchauffé* of Professor Freud's small book on dreams, the authorised version of which was translated in 1914, by Dr M. D. Eder, and of his *Traumdeutung*, translated by Dr Brill in 1913.

Mr André Tridon, who writes a Preface, congratulates the publishers on this volume. We prefer not to characterise the action of a writer who lends his hand to such a transaction as this.

BARBARA LOW.

*Lunacy in India.* By A. W. OVERBECK WRIGHT, M.D., M.B., CH.B., M.P.C., D.P.H., Major I.M.S. pp. xii + 406. London: Baillière, Tindall and Cox. Price, 21s.

As stated in the preface the object of this book is three-fold: (1) to summarize the condition of lunatics in India, and the means available for treatment; (2) to emphasize the importance of toxæmias as ætiological factors in a very large proportion of such cases; and (3) to place on record the views of the author gained from nineteen years residence in the East.

In almost every respect the work under review must be held to be disappointing, except perhaps to those who hold the author's views as to the extreme importance of the leucocyte count as a means of classification and diagnosis of mental diseases.

Except in the statistical and medico-legal sections there is comparatively little in the book which has any special reference to the problem of the Psychoses in India, and very many of the illustrative cases are from English text books and works of reference.

The importance of the Toxæmias as ætiological factors will be felt by many to be unduly stressed, and the classification which considers paranoia to be due to metabolic toxæmia, and katatonia and hebephrenia to bacterial toxæmia, will probably not find many adherents.

In the chapter on Psychasthenia, Neurasthenia and Hysteria there is the confusion of distinct clinical entities which must arise if there is no sympathy with the psychological work which has been done on the Psychoneuroses. Neurasthenia is considered as a practically similar condition to Psychasthenia, the essential differences being that in the former there is no evidence of hereditary taint.

The chapter on Psychology is derived mainly from the works of Stout and McDougall, but the author adds yet another classification of the instincts which he considers most useful to those studying mental diseases. He considers that the sexual instinct is quite apart from the instinct to perpetuate the species.

Under the term sexual instinct he groups the connate tendencies leading to the formation of all that in common parlance is indicated by the words "womanly" and "manly." The instinct to perpetuate the species is apparently confined to the frankly libidinous desires, normal or abnormal.

It is typical of the author's attitude towards the psychological factor in mental diseases when he states that psychologists are now practically unanimous in affirming that the views of Freud and Jung are unsound, and that in another twenty years their teaching will be forgotten or stored as curiosities in scientific libraries.

Galvanism is strongly advocated as a method of treatment both in the acute psychoses and in the psychoneuroses.

M. B. WRIGHT.



*The Psychology of Functional Neuroses.* By H. L. HOLLINGWORTH. Appleton and Co. New York and London. pp. 259, price \$2.

There is a novelty in the plan of this book which arrests one's attention. Instead of attacking the problems of the neuroses by means of direct study of individual cases and individual symptoms, the author, who is a professional psychologist, has approached the subject in quite another way. His essential method is to apply a series of standard laboratory tests to a very large number of cases with the aim of ascertaining what generalisations may issue therefrom.

He begins by giving a very cursory review of the medical work in this field, his attitude towards which is decidedly superior and disparaging. In searching for a central concept that may serve to unify the various data he rapidly disposes of such ideas as are implied in the terms 'dissociation,' 'fixation,' 'conversion,' 'general suggestibility,' 'conditioned reaction,' 'pithiatism,' 'symbolism' and so on; the only one to which he gives even a conditional consideration is 'regression.' Incidentally he quotes some interesting passages from Herbart's *Text-book of Psychology*, containing several anticipations of the Freudian conceptions, such as the rivalry of mental elements, the suppression of the weaker by the dominant, persistence of the suppressed element below the threshold of consciousness, its transformation in the effort to express itself, distinction between the conscious and the unconscious mind, and so on; the main difference here is that Herbart operated in terms of ideas, and not of those of more dynamic elements. It is historically untrue, however, to say that these conceptions were 'adopted bodily' by Freud from Herbart (p. 10). It may be imagined that the author will have nothing to say to Psycho-Analysis. He dismisses what he calls "this extravagant and analogical machinery" in the following words: "The intricate mazes, transformations, and epicycles of the psychoanalytic dogma in its present form resemble the familiar Ptolemaic astronomy, which waited long for a simple formulation that would place the observed facts on a basis of actual understanding" (p. 150).

The author finds his unifying concept in Hamilton's term redintegration, though he somewhat modifies the sense of this, defining it thus: "Redintegration is to be conceived as that type of process in which a part of a complex provokes the complete reaction that was previously made to the complex stimulus as a whole" (p. 19). Thus when a child has been frightened by a complex stimulation emanating from a dog, the entire fright reaction may subsequently be evoked by one part alone of the stimulus, *e.g.* a growl, even though this emanates from a parent hiding behind the door. He then discusses four types of faulty redintegration, those characteristics of the hypomanic, the feeble-minded, dementia praecox and the psychoneurotic respectively. The distinguishing feature of the last-named type he finds to be a tendency to react in redintegrative fashion to outstanding and often irrelevant items that are only an insignificant part of the total complex experience. This he traces to "faulty sagacity," to use James' term. He is now confronted with the obvious problem of the cause or meaning of this particular mode of faulty response and it must be said that he evades this problem in a distinctly barefaced manner. "If it now be asked why some individuals show stronger inclination toward the redintegrative type of response to outstanding but

irrelevant details, it is perhaps most pertinent to point out that the same question should be asked of those whose descriptions of the psychoneurotic picture are in terms of symbolism, free-floating affect, conversion of libido, pithiatism, etc. In such cases no clear basis of individual differences, and hence no adequate etiological account is forthcoming. Hence even if we could offer no satisfactory reply concerning the causes of individual differences, the redintegrative mechanism would be in no greater predicament than are the other explanatory concepts" (p. 62). He then proceeds to translate his chosen concept into neurological terminology, though it is not clear what is gained thereby. "A special merit of the redintegrative concept is to be found in the ease with which it dispenses with this elaborate fiction of the efficacious unconscious" (p. 71), an idea which "flagrantly and naively ignores the familiar canons of demonstrations and proof" (p. 71).

The main thesis of the whole book is that the essential feature of psychoneurotic redintegration is the "constitutional cortical inferiority (intellectual deficiency)" of the patients, their mental competence being just above that of the feeble-minded (p. 77). "If we have been justified in distinguishing between sagacity and learning, the psychoneurotic's chief difficulty is in the former function, and he may in a given case be pitifully weak in sagacity, yet relatively competent in general alertness. On the whole, however, the trait of sagacity is undoubtedly a component of that more general characteristic which we commonly call intelligence, and mental measurements of psychoneurotic soldiers show very clearly that these cases are inferior to the average citizen. They occupy, in fact, that region of the frequency curve lying just below the average intelligence rating and just above the highest grade of the feeble-minded. They occupy the region of stupidity. It is highly probable that the various 'character defects' so commonly ascribed to the hysteric—dependence, extreme suggestibility, naïveté, forgetfulness, credulity, deceitfulness, impulsiveness, volitional debility, etc. portray simply the humble intelligence of these patients, rather than the presence of a peculiar 'hysteric make-up' or 'neurotic constitution'" (pp. 78, 79).

The second part of the book comprises a presentation of data intended to demonstrate the truth of this thesis. They are obtained from applying a series of modified Binet-Simon intelligence tests to 1200 cases of war shock cases at Plattsburg Barracks, New York State, where the author worked during the war. As tested in this way, the average mental age of the normal American soldier was known to be fourteen years, but that of the patients suffering from neurasthenia, psychasthenia, and other forms of neurosis, was found to be round about twelve years. It was found further that the average mental age in the cases of conversion hysteria, *i.e.* with physical symptoms, was no less than four years lower than that of patients suffering from psychical symptoms. The author correlates this last finding with the familiar observation in all countries that the former class of case occurred much more characteristically among the ranks and the latter among officers. He ascribes this, however, to the difference in average intelligence subsisting between the two classes of men, and not, as is usually done, to the difference in the psychical situation to which they were exposed (responsibility, motive, prestige, and so on).

A further set of interesting data is furnished by the results of a questionnaire of 116 points, which was made just before and after the time of the armistice. The beneficial effect of this event is shown very clearly, and the

author analyses in detail the respects in which the answers differed before and after it.

The fundamental criticism of the mode of approach in the work here presented, one which evidently has not occurred to the author, relates to the whole of the work now being carried out by means of the various intelligence tests. It is this; that no general conclusions drawn from them can be regarded as other than tentative until some serious study is made of the extraordinarily subtle way in which the individual responses are influenced by affective factors, especially by unconscious ones. The fallacious assumption, for instance, that the emotional disorders from which the author's subjects were suffering had no influence on their responses to the intelligence tests he applied vitiates his conclusions as to the intellectual difference between the neurotic and the healthy, and therefore those as to the nature of neurotic reactions.

ERNEST JONES.

## NOTES ON RECENT PERIODICALS.

*The International Journal of Psycho-Analysis*, Vol. I, Part III, 1920.

Perhaps the most interesting and useful portion of this number is that which is devoted to condensed translations of collective reviews dealing with the progress of Psycho-Analysis during the past six years. Theory of Instinct and Sexuality is dealt with by Ed. Hitschman; Special Pathology and Therapy of the Neuroses, by Karl Abraham; Psycho-Analytic Therapy, by Van Ophuijsen; General Theory of the Neuroses, by S. Ferenczi; Child Psychology and Education, by H. Hug-Hellmuth.

Among the original articles the following may be noted: C. P. Oberndorf writes on "Reaction to Personal Names" and gives illustrations of the unconscious motives that may lead a person to change his name. Stäreke, writing on "The Reversal of the Libido-Sign in Delusions of Persecution," and Van Ophuijsen, "On the Origin of the Feeling of Persecution," both come to the conclusion that delusions of persecution are derived from an anal complex, and that the loved person who reappears as the persecutor has unconsciously been identified with the "Skybalum" which is "the primary (real) persecutor." H. Flournoy gives an account of some "Dreams on the Symbolism of Water and Fire"; and Hanns Sachs relates a short history of a case in which he traces the origin of "The Wish to be a Man." Ernest Jones, in "A Linguistic Factor in English Characterology," seeks to find an explanation of the "insistence on propriety" which all foreign observers consider to be a characteristic trait of the English people. He thinks this trait has been fostered by the peculiar nature of the English language which provides a duplication of its vocabulary owing to its twofold origin from the Saxon and the Norman. More feeling is developed when the mother tongue is used, and it is notorious that the words which are considered most 'indicate' or 'vulgar' are words of Saxon origin. The possibility of giving expression to forbidden ideas by using a foreign language is well known, and Dr Jones traces "English propriety" to the inhibition of feeling which accompanied the use of Norman-French and Latin words in the transition from Anglo-Saxon to Modern English.

*The Journal of Neurology and Psychopathology*, Vol. I, No. 4, Feb. 1921.

The greater part of this number consists of Abstracts and Reviews. W. Johnson contributes a useful "Note on Intelligence Tests" and there is an excellent review by C. P. Symonds of some recent studies of animal behaviour and the bearing of these on "The Localisation of Function in the Central Nervous System." In this review an

account is given of the experimental work of Franz and Lashley in America. These investigators, in their work on the training of rats to acquire various habits of a more or less complex nature, were led to enquire into the relation of different cerebral areas to the acquisition or loss of such habits. As a result of their researches they concluded that in learning there is complete vicarious functioning of all parts of the cerebrum, although under normal conditions the various parts have specialised functions. Nevertheless, "this specialisation is only relative and is of such little practical consequence that learning may go on with equal speed in the presence or absence of the specialised areas." The bearings of these results on Clinical Neurology are briefly discussed by Dr Symonds and he suggests that some of the success attendant on re-education in the treatment of the so-called hysterical element in organic nervous disease may be consequent upon a true re-learning;—we may have here a true instance of vicarious functioning.

Alfred Carver contributes some "Notes on the Analysis of a case of Melancholia." His experience leads him to believe that "the underlying fact in melancholia is a failure of re-adaptation to an environment which, owing to a certain deprivation, has been rendered devoid of interest," and that "of all the psychogenetic psychoses melancholia is the most amenable to treatment, though in view of the frequency of relapses one is not justified in speaking of a cure."

*The Psychoanalytic Review*, Vol. VIII, No. 1, Jan. 1921.

The new volume opens with "A Psychologic Study of Abraham Lincoln" by L. Pierce Clark. The author believes that the true historical interpretation of any great epoch is not possible until we make a complete psychological study of the people of that particular period, especially of its great men and leaders. He attempts to find the origin of the periodic depression from which Lincoln suffered throughout his life. He bases his conclusions on reliable historic documents. From this study "it would seem that no small part of Lincoln's depression was due to certain deep, unconscious fixations or soul-attachment to the mother hindering the normal emotional life which in turn made it impossible in early life for him to assume the usual attitude of religious feeling and thought." Towards the end of his life Lincoln "accepted a religious outlet, as a means for unconsciously solving or sublimating a large part of his regressive relations with life which had heretofore taken the form of intensive and prolonged depressions."

A contribution by Dr Barnes, Professor of History at Clark University, entitled "Some Reflections on the Possible Service of Analytical Psychology to History" deals with the same topic as Dr Clark's paper. The lives of Alexander Hamilton and Thomas Jefferson are examined and the unconscious roots of their profoundly different characters are pointed out. "To a very large degree," Dr Barnes says, "our strong federal government has been but a collective appropriation of the authority-loving and reality-conquering personality of Alexander Hamilton." Hamilton's contact with his father was very slight and he had no experience of male parental domination and the consequent development of an anti-authority complex such as underlay the freedom-loving character of Jefferson. Thomas Jefferson was a slight and pallid youth whose father was "a gruff giant with a tremendous temper," and the experiences of his boyhood were such as were exactly suited to developing an abnormal anti-authority complex. "In a very real sense the Jeffersonian democracy can be regarded as an elaborate disguise and secondary rationalization of his innate revolt against authority and it is as accurate to say that American democracy may be traced back to the recoil of the pallid youth of Shadwell from his gigantic and formidable father as to hold that it derives its origin from the Teutonic folk-moot or opposition to the political and economic program of Hamilton."

Jackson Edmund Towne, in "A Psycho-Analytic Study of Shakespeare's *Coriolanus*" shows that "the story of a bold warrior losing his triumph because so 'bound to's mother' is clearly but a variation of the most essentially tragic of all myths, that of Oedipus."



In a paper on "Religion in the Light of Psycho-Analysis" Cavendish Moxon gives an account of the Freudian view of the part played by religion in the lives of individuals and of the results to society which follow widespread addiction to religious practices. "By turning men's love towards imaginary objects, religion robs society of the vast sum of energy that is used in prayer and ascetic self-mortification." "The man who has the power and opportunity to love and live with all his might needs no religious consolation."

"A Psychoanalytic Study of Manic-Depressive Psychoses" is the title of a paper by Lucille Dooley which is continued in the next number of the *Review*. This study contains much interesting case-material and some probable results of analysis are referred to; but as the author pertinently says, "Because of the irregularities in the manifestations of this disease no one can be sure of the efficacy of any form of treatment until many cases have been studied through a life-time."

*The Psychoanalytic Review*, Vol. VIII, No. 2, April 1921.

"The Rudiments of Character," by David Forsyth, a paper read before the British Psycho-Analytical Society, is given the first place in the April number. Dr Forsyth endeavours to establish the main facts of infant psychology and the relation of these to character in adult life. He says there is no break in the psychology of the child immediately before and after birth; yet he considers the mind of the new-born child to be a blank as far as intelligence goes and to be lacking in all experience gained through its bodily senses. In birth the child passes from a state of Nirvana-like contentment to one of intense physical distress accompanied by fear. "This most dreadful experience marks the division of an infant's emotions into these two kinds." The intra-uterine state is termed the "vegetive state" and its affective concomitant "vegetive emotion." In this state all wants are supplied without effort and psychic life has not begun. Only with birth do needs arise which require for their satisfaction the activity of the nutritive and secretory functions. These are associated with four highly sensitive areas—the oral zone, the urethral zone, the anal zone and the respiratory zone. Through these zones pleasure is experienced when the tension due to deprivation is relieved by the appropriate stimulus.

The two emotions first to find special expression are love and hate. Love is the feeling bestowed on an object which can satisfy a bodily want. The original objects between which the infant's love is distributed are milk, urine, faeces and breath. "Experience shows that children in whose emotional life the associated zones come to fill too large a share are the most difficult to train and present the most serious anomalies of temperament in adult life.

Lucille Dooley's "Study of Manic-Depressive Psychoses" is concluded in this number. She found the therapeutic results of Psycho-Analysis to be meagre and doubtful. Her failure she ascribes partly to faulty technique, partly to the material worked upon and the handicaps of the surroundings.

Edward W. Lazell writes hopefully of "The Group Treatment of Dementia Praecox." This apparently consists of the delivery of lectures, in which the explanations of the causes and symptoms of dementia praecox are given, to selected groups of patients. As a result of his experience of the method Lazell says: "Taking into consideration the enthusiasm of the writer, and admitting that the results were not likely to have been underestimated by him, there still remains a large factor that cannot be ascribed to the tendency to so-called spontaneous recovery so often seen in praecox."

The number concludes with two interesting notes on literary subjects. Dr J. S. Van Tessaar shows how the Christian tradition of the death of Pan, as a historic occurrence of incontrovertible veracity, may have originated through a misinterpretation of words heard, and Margaret K. Strong gives "A New Reading of Tennyson's *The Lotus Eaters*." "By the device of balanced stanzas, Tennyson presents in the Choric Song the antithesis of a dissociated personality, unreconciled; indulgence versus struggle, sensuality versus rationalism."

*The Journal of Abnormal Psychology*, Vol. xv, Nos. 2 and 3.

This double number opens with an important article, by Dr Morton Prince, on "Miss Beauchamp: The Theory of the Psychogenesis of Multiple Personality." This study, he tells us, consists of condensed chapters from a volume, planned as a larger study of the problem of human personality, whose publication was deferred owing to the outbreak of the war. The present paper, which deserves fuller consideration than can be given in these Notes, deals with the psychogenesis of Sally, B I and B IV.

A paper on "Four cases of 'Regression' in Soldiers" is contributed by W. McDougall. In these four cases the dominant feature was a regression to early childhood. Their behaviour afforded evidence of a re-animation of infantile modes of functioning which had been superseded and apparently lost or suppressed in the course of growing up from infancy. Dr McDougall compares this outcropping of infantile modes of functioning after severe 'shell-shock' to the new outburst of growth and vital activity which takes place in the older and more primitive parts of a tree when the most recently formed parts are injured or destroyed. He therefore regards "regression" as a biological rather than a psychological process.

"Resolution of a Skin Phobia with Nightmare: A Case of Mental Readjustment in Dreams without Conscious Catharsis" is the title of a paper by Lydiard H. Horton in which he illustrates the use of his "inventorial technique" in the interpretation of dreams. "The dreamer was led to adjust her own mental disharmony through 'dreaming it out'....After two months a 'resolution' dream came which completely eliminated the phobia and the nightmare....The subject gained relief without acquiring that insight into her own complexes which usually is considered necessary."

Alfred Gordon writes on "Illusion of 'The Already Seen' (Paramnesia) and of 'The Never Seen' (Agnosia)," and gives short notes of seven cases in which one of these illusions was present. He does not consider such disturbance of 'recognition' by itself to be pathognomonic of a fundamental psychic alteration in the personality since it may occur in normal states of health. Several factors may be concerned in the production of non-recognition. The most satisfactory interpretation is that which ascribes the illusions to disturbances of the organised motor reactions on which, according to Bergson, the sense of 'familiarity' is based.

T. W. M.



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## THE BRITISH JOURNAL OF PSYCHOLOGY MEDICAL SECTION

### THE INFLUENCE OF THE ENDOCRINES IN THE PSYCHONEUROSES<sup>1</sup>.

By W. LANGDON BROWN.

#### SYNOPSIS.

*The hormone theory at one time tended to an undue depreciation of the importance of the nervous control of the body.*

*The primitive nervous system was evolved for defensive purposes, and the sympathetic nervous system retains primitive features both structurally and functionally.*

*There is a close association between the sympathetic nervous system and the endocrine glands as defensive mechanisms, and their action is reciprocal.*

*The endocrines, gonads and sympathetic nervous system form a basic tripod entrusted with the defence of the individual and the continuity of the species.*

*Endocrine glands may be influenced by toxic, nutritional and psychic factors, so that they may, alike, cause or be affected by a psychoneurosis.*

*The endocrine-sympathetic system is merely the lowest level of the whole nervous system, and is inextricably entangled with the other levels.*

*Hence the important influence of the endocrine system on psychical life.*

THE theory of internal secretion has always been in advance of the facts. The very name was introduced by Claud Bernard when the only known example was the glycogenic function of the liver. Brown-Sequard's interesting hypotheses rested on but a small substratum of fact. Yet subsequent observations have confirmed many of their generalisations. This may happen with the uncontrolled speculations on endocrinology

<sup>1</sup> Read before the Medical Section of the British Psychological Society, June 22nd, 1921.



## 2      *Influence of the Endocrines in the Psychoneuroses*

which are rife to-day. But we must always bear in mind that it has not yet occurred. -

The last decade of the 19th-century added greatly to our knowledge of the physiology of the ductless glands, while in 1902 Bayliss and Starling's discovery of secretin opened out the vista of a chemical control of the body, in which the nervous system merely acted as a trigger, firing off a series of reactions. This conception was elaborated until it bid fair to dethrone the nervous system from its supreme position, although Langley had already provided the antidote by his generalisation that the action of adrenalin on any part was the same as that obtained by stimulating the sympathetic. But the far-reaching significance of that generalisation was not yet appreciated. "The race is not to the swift nor to the strong but to the wise." "The key to evolution lies in the continuous development of the nervous system"—said Gaskell. Or, as Elliot-Smith put it: "Man has developed and become the greatest of the primates because of his faithful dependance upon development of the brain." Considering the struggle the central nervous system has had to obtain control, it is not likely it would abdicate its suzerainty in favour of the more ancient dynasty of chemo-tropism.

We ordinarily speak of the evolution of the nervous system as peacefully accomplished. A struggle for supremacy between two animals or between two species, we recognise. But it would appear that a similar struggle accompanies the integration of the multicellular individual. Many apparently peaceful events in nature prove on closer analysis to involve a concealed struggle. Man is a gregarious animal but he has not found it an easy task to adjust the desires of the individual to the needs of the community. Philosophers may lament this, theologians may attribute it to original sin, but it should lead the biologist to enquire whether the cells of which he is composed have always found it easy to sink their individuality in that of the organism. The thesis of a hostile symbiosis between the tissues of the body has been skilfully upheld by Morley Roberts. A strong central government is needed to keep order and no high degree of differentiation is possible in the animal body without the control of a centralised nervous system, which has gradually acquired an increasing predominance. It is not too much to say that this control, though for the benefit of the body as a whole, may be resented by the individual tissues. Wilfrid Trotter in a remarkable paper on "The Physiology of Pain" has recently developed the argument of an hostility between nervous and somatic tissues, which is expressed in the way the former insulates itself.

Without defensive mechanisms no animal can survive in the struggle for existence, and no method of defence remains impenetrable, for, if it were, the species possessing it would multiply to the exclusion of others. As evolution proceeds the apparatus for defence comes under the control of a central nervous system. Some defensive mechanisms, such as nettle cells, never become so controlled, but are replaced by other methods as the nervous system evolves. Certain primitive motor apparatus, such as cilia, also never come under such control, though they persist even in the highest animals. In general terms a central nervous system enables very rapid reactions to occur, and the need for such rapidity of response will first be experienced in the struggle for existence, when its advantage is at once manifest. G. H. Parker in his book on *The Elementary Nervous System* has brought new observations into relationship with previously known facts and has impressed upon us afresh that a nervous system starts as a series of independent receptors and effectors in the deeper layers of the skin, the cells of which sink in deeper and deeper, until they become concentrated into a central nervous system. Between the receptor and effector an adjustor mechanism develops, which is the germ of the whole associative apparatus. In the vertebrates these inter-nuncial adjustor neurons compose the chief mass of the central organs. It is not too fanciful to compare the origin of the nervous system to a group of settlers on the coast, who gradually invade the interior, first singly and then in an organised army, as in the nervous system of vertebrates which arises as a tubular invagination from the surface. Once established the invader assumes control over the indigenous inhabitants, fortifying itself as it goes and maintaining its protectorate by a system of rapid communication throughout the invaded areas. The biological and sociological parallel is remarkably complete.

The sympathetic nervous system retains several primitive structural features—its ganglion cells remain peripheral, it operates through a primitive nerve net in such places as the intestine, and it has adjustor neurons lying largely outside the central nervous system. Functionally it recalls primitive methods in its lack of discriminative sensibility, and in the urgent, immediate, widespread and explosive character of its response. The sympathetic nervous system being originally evolved for rapid defensive purposes, the persistence of such primitive methods becomes intelligible.

Hostile symbiosis does not exclude alliances, and the sympathetic nervous system has entered into a close alliance with the endocrine glands, which represent a specialised survival of the old chemiotropic

#### 4 *Influence of the Endocrines in the Psychoneuroses*

methods of control. The closeness of this alliance is particularly well seen in the adrenals. The chromaffin cells and the sympathetic ganglion cells migrated out from the sympathetic nervous system together, but the latter gradually became the more abundant, while the connector fibres of the sympathetic end alike around both and stimulate them to action. The medulla of the adrenal and the post-ganglionic elements of the sympathetic nervous system are homologous structures; and there is a gradual predominance of the nervous over the chemical element in the partnership as the higher levels of the nervous system are evolved. Further, their influence is reciprocal—the sympathetic exciting the secretion of adrenalin while adrenalin stimulates the sympathetic endings. Herein we can begin to appreciate the full significance of Langley's generalisation. A similar reciprocity exists between the thyroid and the sympathetic, the sympathetic stimulating thyroid secretion, which in its turn lowers the threshold to sympathetic stimulation. But further, thyroid secretion quickens the whole metabolic activities of the body, and that is precisely how the sympathetic activates the body for flight or fight.

I need hardly stop to remind you how the effects of sympathetic stimulation are designed to this end since it has been done in so masterly a fashion by Canon. I will content myself with a few, perhaps rather dogmatic statements to clear the ground for the next step in my argument.

The autonomic, vegetative or visceral nervous system consists of two great divisions, the sympathetic and the parasympathetic or extended vagus. The former is katabolic, converting potential energy into kinetic and facilitating outward manifestations of that energy, while the latter is anabolic, directing energy inwards where it is stored up. When these two are distributed to the same structure their action is always antagonistic, and when one is stimulated the other is inhibited. The rhythm of life largely depends on the fluctuating balance between these two. The parasympathetic plays the chief part in the digestion and assimilation of food, the sympathetic spends the energy thus derived. In sleep the parasympathetic gains control, and the arrest of external manifestations of energy lasts until the balance is restored in favour of the sympathetic, when the subject awakens ready to expend energy again.

Each of these great divisions co-operates with a group of endocrine glands—the sympathetic with the adrenals, thyroid and pituitary, the parasympathetic mainly with the glands of the digestive organs and their annexes. Possibly the parasympathetic co-operates also with the para-

thyroids and some lymphoid structures, but this is too controversial a matter to consider now.

My next point is to remind you that as special cells were of necessity set apart for reproduction as soon as the protozoon evolved into a multicellular organism and even before the latter developed a nervous system, it is only to be expected that a close relationship should persist between the gonads and the primitive chemiotactic mechanism now elaborated into the endocrine glands. And since the sympathetic nervous system entered into a defensive and offensive alliance with the endocrine glands, a basic tripod came to be formed which was entrusted with the duty both of the preservation of the individual and the continuity of the species. Their structural association is indicated by such facts as the common origin of the adrenal cortex and the interstitial cells of the gonads from the Wolffian body, and the development of the thyroid from the uterus of the Palaeostracan ancestor. Their close association is shown in disease as well as in health and is reflected in many psychoneuroses. Disease is not likely to manifest itself in one limb of this tripod for long without affecting all three.

To get a general conception of the principles of internal secretion it is necessary to start from the premise that the development of each individual recapitulates, briefly and with modifications, the history of the race. And it is helpful to remember that while life has been present on the earth for millions of years, man did not appear more than a comparatively few thousand years ago. Every time an individual repeats the history of the race he does it more easily as the result of practice. Thus it happens that the foetus in nine short months of pre-natal life recapitulates the history of millions of years, while his longer infantile life only repeats the history of a few thousand years. That even an adult may speedily revert to the instincts and habits of a cave man the war has abundantly shown. Later veneers of civilisation are easily cast aside.

Now the most primitive forms of life multiplied by simple fission. The unfertilised ovum is the nearest approach to the primordial cell that we know. Like the primordial cell it starts to divide by simple fission, forming two polar bodies. Millions of years ago simple fission was found inadequate for a complex animal, yet every ovum starts on this course till it is abruptly brought up by the consequent exhaustion of its powers of growth. But when fertilisation has remade its nuclear network a tremendous impetus is given to growth. When growth is expressed as a fractional increase of body weight it will be found that its curve continuously diminishes from fertilisation onwards. In other words, the



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impetus thus derived gradually wears itself out. A new life may be compared to a projectile travelling with a constantly diminishing acceleration. But unlike an ordinary projectile it is supplied with intrinsic regulators, capable of increasing or diminishing its velocity. These regulators are the two groups of endocrine glands and their associated nervous mechanisms. In the first few years of life the original impetus is so enormous that a brake is needed—which seems to act through the thymus. By seven years of age this brake is needed no longer, and should it continue to be applied from any cause, infantile features persist. With the aid particularly of the thyroid and pituitary, active growth continues until puberty gives another twist to the mechanism from the active development of another set of glands—a new position of equilibrium has to be found. With adult years a part of the energy is diverted from growth of the individual to providing a supply for the next generation; and again the regulators have to provide a new adjustment. Another jolt—often a violent one—is given to the mechanism by the climateric, and yet a new position of equilibrium has to be acquired. From this point on, the dying down of the initial velocity is marked; the accelerating thyroid seems to die down before the sedative parathyroid; calcium fixation goes on unchecked, therefore; the intercostal cartilages grow rigid, the chest becomes emphysematous, greatly diminishing the bodily activities by restricting respiratory exchange, the arteries become calcareous, diminishing the blood flow to every part of the body, while childish and even infantile characters may reappear as the organism slows down for the terminus.

This may be considered the normal course of events. That everybody should ultimately only die from senile decay is the goal of medicine. But apart from violent death the regulators may become worn out with consequent increase of friction to the mechanism.

Invasion by bacteria and their toxins may prematurely exhaust the endocrine glands, or endogenous poisons may produce a similar effect; metabolism becomes balanced on a razor edge, the sport of every wind that blows. Nervous shocks and strains excite a reaction of the sympathetic nervous system and, through it, of its associated chain of endocrine glands, with consequent exhaustion of them. And these two sources of endocrine exhaustion may interact, so that a psychic conflict may be produced because the body cannot adjust itself to a difficult environment largely because of an endocrine deficiency. Thus the two newest methods in medicine, psychotherapy and endocrinology, become not opposed but different aspects of the same problem. Or a body may start out ill-equipped with a supply of endocrines, so that its growth curve suffers

a steep descent, as in the rare condition progeria, where senility comes on in childhood and the patient dies "an enfeebled old dotard of five." In dementia praecox we probably have a mixture of such causes at work—an atavistic reversion in bodily structure, as shown by the monkey-like hands; a gonadal deficiency, with a consequent persistence of an infantile outlook, hence a total failure of adjustment to the conditions of adult life; the mind defensively withdraws itself from its environment, and consequently undergoes rapid involution.

I wish next to call your attention to some remarkable and until recently unsuspected consequences which flow inevitably from the insulation of the central nervous system. This insulation also affects the cerebral blood vessels which are remarkably impermeable to drugs and toxins as long as they retain their integrity. How then do bacterial infections produce fever? The old conception of their stimulating some heat-regulating centre in the brain becomes untenable. Fevers are known to be followed by changes in the adrenals and thyroid, but Cramer has been able to show that anything which calls for increased production of heat definitely increases the secretory activity of these glands. Mere exposure of a mammal, though not of a cold-blooded animal, to a low temperature will effect this. The injection of the drug known as T.H.N. will produce similar changes together with all the phenomena of heat-stroke and only exposure of the injected animal to cold will prevent a fatal issue. He has found similar changes in hyperpyrexia and to a less degree in all fevers. He regards the heat regulation of the body as mainly effected peripherally, and points out what a profound effect climate must therefore have on the endocrine glands. Indeed, when one compares the brain, rigidly shut off in its bony box, with the peripheral apparatus in the skin, possessed of sensitive end-organs, responsive blood vessels and sweat glands, together with the power of acquiring protective pigment, the case for a peripheral regulation of the temperature becomes so plausible as to cause wonder at its being overlooked so long. This was, no doubt, because it was difficult to see how sufficient co-ordination could be obtained, as long as the close ties between skin, sympathetic nervous system and endocrine glands were not appreciated. Leonard Williams some twelve years ago called attention to the influence of climate in moulding racial character through the endocrine glands, but his conception was too much in advance of current medical thought then, to receive the attention it merited. He pointed out that not only are the differences between the white man and the black, between Asiatics and Europeans, between the Latins and the Saxons admittedly

and even obtrusively climatic in origin, but that modifications through climate can still be seen at work. He says: "In illustration of the last point I need only mention the fair skin and the red hair which long residence in northern climes has conferred upon some Jewish families, and the stereotyping by the climate of the North American continent of the descendants of its widely dissemblant annual European recruits into the hatchet-shaped face and wiry frame of the Red Indian aborigines." He suggests that the skin may be compared to a sensitive plate, stimulation of any portion of which will produce reflex activities in some distant organ and he regards the formation of cutaneous pigment as protective against such stimulation becoming excessive. The distant organs mainly affected in this way he believes to be the endocrine glands, and it is obvious that the adrenals, for instance, play an important part in the pigmentary changes in the body. Recent observations show the pituitary must share directly in this since tadpoles that had the anterior lobe of that gland removed became albinos. The unadaptability of albinos to climatic changes is well known. This is an instance of the way in which the theory of internal secretion preceded the facts, but now the facts are accumulating in support of the theory. At the time the theory was put forward the close association between the sympathetic-endocrine system and the higher levels of the nervous system was not sufficiently recognised to make it acceptable. But I think we are now justified in saying that climatic environment can modify our psychic "make-up" through the endocrine glands.

We may extend to all the endocrines McCarrison's statement that the thyroid gland is affected alike by toxic, nutritional and psychic factors, and is particularly likely to be injuriously influenced if more than one such factor is overtaking it. The influence of toxins can be more precisely understood now that Cramer has demonstrated the mechanism. His work also explains how a sympathicotonic reacts vigorously to infection, whereas a vagotonic does not, and, indeed, shows an abnormal sensitiveness to many foreign proteins, whether bacterial or not. Thus the same toxin may excite asthma in the latter type and excessive fever followed by an exhaustion neurosis in the former.

That a prolonged fever may be the starting-point of a psychoneurosis has long been known and can now be explained. This is naturally more likely to occur in one who previously showed some endocrine weakness.

Thus I saw a man of 38 in consultation whom I found to be suffering from paratyphoid fever. After this he developed an extraordinary anxiety neurosis. I thought that in addition to the hypoadrenalinism induced

by the infection there was a strong psychic factor, for which I referred him to Dr Crichton Miller. He reacted to every obstacle or disability like an infant in the presence of an omnipotent mother. The mother substitute in this case was his sister. He could not cast aside childish trammels, but had been able to conceal this psychic disability until the toxic factor had lowered his endocrine resistance. Psychotherapy produced a dramatic improvement in his symptoms.

The nutritional factor would seem to be chiefly associated with lack of vitamins which, as McCarrison has shown, causes enlargement of the adrenals and pituitary while causing some atrophy of the other endocrine glands. In pellagra we have a striking example of a deficiency disease producing actual structural changes in the adrenals and sympathetic ganglia and leading to mental deterioration. In this connection it is of great interest to note that pellagra is much more likely to affect defeated than victorious soldiers, showing the influence of depressing emotion in permitting a disease directly due to lack of assimilable protein to obtain its hold on the endocrine system. Whereas toxic and nutritional influences play chiefly on the glandular part of the apparatus, psychic factors naturally act primarily on the nervous part; though ultimately both parts will become affected, whichever is involved first. It is to fear, pain and rage that the sympathetic particularly reacts since these are the stimuli which normally lead to those violent motor responses for which sympathetic action prepares the way. Rage, as McDougall has shown, is particularly excited when other primitive emotions are baulked of their expression. That pain is a developed phase of all primitive sensation is highly probable, as Trotter has shown, and I think a good case could be made out for regarding fear as the intensified form of the primitive emotion that leads either to immobility, i.e. the "shamming dead" reflex through the parasympathetic, or the violent response by flight through the sympathetic. In the civilised state the response appropriate to primitive man has often to be repressed. Such repressions are particularly likely to be necessitated when the great instincts of self-preservation, reproduction and gregariousness which relate respectively to the life of the individual, of the species and of the community come into conflict with one another. The effect of this repression may show itself at any of the three great levels of the nervous system, at the psychic level as a phobia or an obsession, at the sensori-motor level as a paralysis, contracture, tic or paraesthesia, or at the sympathetic level in some cardiac or digestive neurosis, or in some endocrine disease. The autonomic level of the nervous system works through the endocrines; just as the



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psychic level expresses itself through symbols (Smith Jelliffe). Just as in the psychoses the symbols acquire an abnormal significance, so in vegetative neuroses the endocrine glands behave abnormally.

One of the general phenomena of disease is dissociation. Normally the sympathetic should act as a whole, but in emotional glycosuria we have a good example of dissociated action affecting entirely or mainly carbohydrate tolerance. The adrenals, thyroid and pituitary are alike stimulated by the sympathetic and lower carbohydrate tolerance. The pancreas is innervated by the parasympathetic and raises carbohydrate tolerance. When the former group is stimulated the latter is inhibited, hence any of the emotions which excite the sympathetic will tend both directly and indirectly to flood the blood with sugar. If this is not utilised for muscular energy and heat production it is liable to overflow into the urine.

The influence of excitement and emotion in causing glycosuria is well recognised. It is commonest in Jews, a notoriously emotional race. When stocks go down in New York, says Crile, diabetes goes up. Temporary glycosuria occurred in a number of men who merely watched a football cup tie without participating in it. Glycosuria has been, unfortunately, comparatively common in young officers entrusted with heavy responsibilities during the war. Singer and Clark have recorded two cases in which there was alternation between glycosuria and the exhibition of mental symptoms, as if the emotional discharge asserted itself either at the metabolic or the psychic level but not at both.

The thyroid gland provides us with some of the best examples of the association between the endocrines and the psychoneuroses, for here the influence of the basal tripod is clearly revealed, and toxic, nutritional and psychic factors alike may be seen at work. The thyroid tends to enlarge at puberty, marriage and in pregnancy; and alimentary toxæmia has been shown to play a definite part in its pathological enlargement. Sympathetic stimulation has also been proved to be followed by thyroid enlargement, as in Cushing's experiments on the production of Graves' disease in cats by suturing the phrenic nerve to the cervical sympathetic so that the thyroid was stimulated by each respiration. I am convinced that it is a mistake to look upon Graves' disease as purely a primary hyperthyroidism; there is always an underlying sympathetic irritation, which produces hyperthyroidism which in turn increase the sympathetic response, thus establishing a vicious circle.

Crile says: "I have never known a case of Graves' disease caused by success or happiness alone, or by hard physical labour unattended

by psychic strain or to be the result of energy voluntarily discharged." My own belief is that if a distressing emotion has a matrimonial origin it is particularly likely to induce Graves' disease for here each limb of the basic tripod is involved.

The fact that a psychic factor has not been found does not mean that it is not present. Thus in a young man suffering severely from this disease in hospital, I was for a long time unable to discover that factor. In the course of routine examination I had found that he had hyperglycaemia, without glycosuria. One day however he passed sugar. The previous day was visiting day, and the Sister of the Ward told me she had detected in one of the visitors a source of grave psychic conflict.

The effect of fear in producing hyperthyroidism was well shown during the air-raids on London. Indeed the air-raids were almost an "acid test" of race. An uncontrollable impulse to flight from London or into the tubes was almost diagnostic of Semitic origin. More self-controlled people, who nevertheless suffered acutely, repressed their impulses from the motor to the vegetative level and received their reward in hyperthyroidism, amounting in some cases to Graves' disease. Similar outbreaks of this disease followed the San Francisco earthquake and the Kishineff massacres. That Graves' disease, like sympathetic stimulation, is characterised by exaggerated katabolism is proved by recent studies on basal metabolism, which then shows an increase up to 40 per cent. of normal. Whereas in hypothyroidism basal metabolism may be reduced to 40 per cent. of normal. Once the thyroid has been started on this evil course through sympathetic stimulation the emotional agitation is kept up at such a level that psychoneuroses are the rule, and actual insanity is far from uncommon. In the same way fear and anxiety keep up a sympathetic stimulation of the adrenals. If this is met by a hypertrophy of the gland, high pressure symptoms are apt to develop, but if not thus met some degree of exhaustion ensues, as in many war neuroses and other functional states characterised by vasomotor instability, low blood pressure and myasthenia. And it was frequently observed that so-called "disordered action of the heart" was much more likely to occur in soldiers who had recently suffered from an infective condition, which would tend to prevent the adrenals from rising to an emergency.

I hope that I have shown justification for the statement that endocrine glands being influenced by toxic, functional and psychic factors, may, alike, cause or be affected by a psychoneurosis. It is clear that whether the change starts in the gland or in the emotional nervous system, a

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vicious circle is soon set up. But just as the sympathetic nervous system is closely associated with the endocrine glands outside the central nervous system so it is inextricably intertwined with the higher levels inside it. Hence, as Stragnell puts it: "No endocrine inferiority can be present without a psychological change, a retreat or a compensation." Or, as Pottenger says: "The great number of disease processes which express themselves in the vegetative structures (*i.e.* autonomic nervous system and endocrine glands) . . . either interfere with the mechanism of defence or the providing of the organism with sustenance . . . and the individual who has an abnormal vegetative balance wages his struggle for existence with a handicap . . . The ultimate effects are distributed to every system of the body, vegetative, voluntary and psychic. Between the vegetative and psychical systems a vicious circle is established, and each harmful stimulus in the one influences the other. Every disease process of a serious nature, therefore, must have a psychical side to it."

I have not attempted to discuss complex polyglandular syndromes nor the details of the resulting symptoms. I am content if I have been able to indicate the broad biological considerations which seem to me to underlie the influence of the endocrines in the psychoneuroses.

## THE QUESTION OF THE THERAPEUTIC VALUE OF "ABREACTION."

BY C. G. JUNG.

IN the discussion of a paper by William Brown concerning "The Revival of Emotional Memories and its Therapeutic Value," William McDougall, writing in this *Journal* (Medical Section), vol. I, part I, gave expression to some important considerations which I wish to underline. The war-neuroses with their eminently traumatic aetiology have revived the whole general question of the trauma theory of neurosis. During the years of peace this theory was rightly held in the background of scientific discussion, since it is an inadequate conception of neurotic aetiology.

Breuer and Freud were the originators of the theory. Freud, who carried on the investigation of the neuroses, soon adopted a deeper view which took the real neurotic origins more into account. In by far the greater number of ordinary cases of neurosis there is no question of a traumatic aetiology.

In order to create the impression that the neurosis is derived from a traumatic moment, inessential, secondary occurrences must, for love of the theory, artificially be brought into prominence. As a rule these traumata, when they are not mere artefacts of medical phantasy, or from other reasons dependent upon the compliancy of the patient, are secondary events, consequences of an already existing neurotic attitude. The neurosis is, as a rule, a morbid, one-sided development of personality, arising from very slender, indeed ultimately invisible beginnings, which can be followed back, as it were indefinitely, into the earliest years of childhood. An arbitrary judgment could alone decide where such a neurosis really begins.

If its determination were shifted back into the intra-uterine existence, thereby involving the psychical and physical disposition of the parents at the time of pregnancy and conception—a view which in certain cases seems not at all improbable—such a standpoint would, in any case, have more justification than the arbitrary selection of a definite point of neurotic origin in the individual life of the patient.

Clearly, in the handling of such a question, one must never remain



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held by the surface appearance of the developed symptoms, even when the patient, as well as his family, synchronises the beginning of the neurosis with the first manifestations of declared symptoms. A more thorough investigation will, without doubt, be able to demonstrate the presence of a morbid tendency of some kind, existing long before the appearance of clinical symptoms.

These obvious facts, long familiar to every specialist, pushed the trauma theory into the background, until through the war a veritable high-tide of traumatic neuroses was released.

If we discriminate among the number of war neuroses all those numerous cases where a trauma—an undoubted violent shock—impinged upon an already established, previous neurotic history, there remain not a few cases where, if some sort of neurotic disposition worthy of mention really existed, it was so insignificant that without trauma an actual neurosis could hardly have resulted. In these cases the trauma means more than a mere moment of release. It is actually causative in the sense of the *causa efficiens*, especially when one includes the unique psychical atmosphere of the battle-field as an essential factor in the reckoning.

These cases present a new therapeutic problem which seems to justify a harking-back to the original *Breuer-Freud* method just as much as to the theory; for the trauma is either concerned with a single, definite and violent impact, or with a complex of ideas and emotions which can be directly compared with a psychic wound. Everything that touches this complex, however slightly, excites a violent reaction, an actual emotional explosion. One can easily, therefore, arrive at the idea of representing the trauma as a complex of high emotional charge and, because at first glance this enormously effective charge seems actually to be the disturbing and pathological cause, one can, in consequence, postulate a therapy which most thoroughly seeks to release this charge. This very simple as well as logical standpoint apparently agrees with the fact that abreaction, i.e. the rehearsed experience of the traumatic moment, in the form, for instance, of an affectively animated repetition in the waking or hypnotic state, has often a favourable therapeutic effect. The mechanism is familiar to the popular mind: everyone knows that a man feels an almost compelling need to recount a vivid experience again and again until it has finally lost its affective value. It is indeed proverbial: a man lightens his heart with a confession, "what filleth the heart, goeth out through the mouth." This is nothing else but an unloading which gradually depotentiates the affective value of the traumatic experience until it distresses no longer.

This conception, apparently so clear and simple, is unfortunately—as McDougall rightly objects—like so many other equally simple and therefore delusive explanations, inadequate; such views must then be fanatically and dogmatically maintained, since they cannot hold their ground in the face of experience. Again McDougall is right when he points out that there occur a not inconsiderable number of cases where abreaction not only is no use but is actually harmful.

In face of this, it is possible to take the standpoint of the injured theorist and say, one has never claimed that the method of abreaction is a panacea, and in any event refractory cases occur with every method.

In answer to this, I would like to point out, that it is precisely in a careful study of the refractory cases that one gains a more illuminating insight into the method or theory in question, than through an investigation of its “successes.” For it is just such cases that disclose where the theory is weak. Naturally the efficacy and justification of the method is not thereby disproved, but at least the way is prepared for an improvement of the theory and, indirectly, of the method.

McDougall, therefore, has laid his finger on the right spot when he argues that the essential factor is the dissociation of the psyche and not the existence of a high-tension affect, and hence the essential problem in the therapy is the integration of the dissociation and not the abreaction. This argument considerably advances the discussion. It entirely corresponds with our experience that a traumatic complex creates a dissociated condition of the psyche: it is removed from the control of the will and therefore possesses the quality of psychical autonomy.

Its autonomy consists in this, that it manifests itself independently of the will and even in frank opposition to conscious tendencies, thus forcing its existence tyrannically upon consciousness. The explosion of the affect invades the individuality completely, pouncing upon it rather like an enemy or a wild beast. Frequently I have observed the typical traumatic affect represented in the dream as an enemy or as a wild and dangerous animal—a striking image of the autonomous nature of the split-off affect.

Considered from this angle abreaction appears in an essentially different light: it is an attempt to re-integrate once more into consciousness the complex that has become autonomous. The complex is gradually included as an accepted content of consciousness, mainly through the traumatic situation being simply lived over again, either once or repeatedly.

It is of course questionable, to my mind, whether the thing is actually

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so simple or whether there may not be other circumstances essential to the process. It must, above all, be emphasised, that it is not merely the rehearsal of experience that possesses an unconditional curative effect, but the rehearsal of experience *in the presence of the physician*.

If the healing effect depended merely upon the rehearsal of experience, abreaction could then be performed by the patient alone as an isolated exercise and would require no human object to which it is applied. The intervention of the physician is, however, absolutely essential. One can easily understand what it means to the patient, when he can confide his experience to an understanding and sympathetic doctor. His consciousness finds in the doctor a moral support against the unmanageable affect of his traumatic complex. No longer does he stand alone against these elemental powers, but a trustworthy man reaches out a hand, lending him moral aid in the battle against the tyrannical oppression of the uncontrolled emotion. By this means the power of his integrating consciousness is reinforced until he is able, once more, to bring the rebellious affect under the control of consciousness. This indispensable and absolutely essential influence of the physician may, if preferred, be described as suggestion.

I would rather speak of it as the significance of the human interest and personal devotion of the physician; these belong to no method nor will they ever become one, for they are moral qualities, incontestibly of the highest importance for all methods of psycho-therapy, not for abreaction alone. *The rehearsed experience of the traumatic moment can re-integrate the neurotic dissociation, only when the conscious personality of the patient is so far reinforced by the relationship to the physician, that he is consciously able to bring the complex that has become autonomous once more under the control of the will.*

These are the conditions of the curative value of "Abreaction." But the curative effect does not solely consist in the discharge of the affective tension; it depends, as McDougall shows, much more upon the resolution of the dissociation. We now find that those cases, where "abreaction" has a negative result, assume a different aspect.

Without the co-operation of the other conditions just mentioned, "abreaction" does not alone resolve the dissociation. When the autonomy of the complex is not re-integrated through the rehearsal of the trauma the relationship to the physician can so raise the level of the patient's consciousness that he is able to overcome the autonomy of the complex and to assimilate it. But it easily may happen, either that the patient has a particular resistance against the doctor, or that the doctor has

not a sufficiently right attitude to the patient. In both cases the method breaks down.

It is self-evident that the cathartic method (abreaction), when dealing with ordinary neuroses, which are only in a minor degree traumatically determined, will, as a rule, meet with poor success. Since, in general, it has nothing whatever to do with the nature of the neurosis, the schematic application of the method is, in such cases, quite ludicrous. Even when apparently partial success is obtained it can have no more significance than would the success of any other method that admittedly had nothing to do with the nature of the neurosis.

The success is due to suggestion, it is usually of very limited duration and clearly accidental. This success arises always out of the transference to the physician, which is established without too great difficulty if only the physician has an earnest belief in his method. Because it has just as little to do with the nature of the ordinary neurosis as, for instance, hypnosis and other such remedies, the cathartic method has, with only a few exceptions, long been abandoned and replaced by psycho-analysis.

It is just where the cathartic method has its blind spot that the analytical method is firmly established, viz. *in the relationship to the physician*. It matters little that, even to-day, the view prevails in many quarters that analysis consists mainly in the "digging-up" of the earliest childhood complex in order to pluck out, as it were, the evil by the root. This is the after-effect of the old trauma-theory. Only in so far as they hamper present adaptation, have the historical contents any real significance. The therapeutic effect of the minute and scrupulous pursuit of all the infantile phantasy-roots depends not so much upon these relatively inessential demonstrations as upon the labour the physician gives himself to enter into the patient's psyche, whereby establishing a psychologically adapted relationship. For the patient is suffering precisely from the absence of such a relationship. Freud himself has long recognised that the transference is the alpha and omega of psycho-analysis. The transference is an effort of the patient to establish a psychological rapport with the doctor. He needs this relationship so that he may thereby master his dissociation. The slighter the rapport, i.e. the less substantial the mutual understanding, the more intensely will the transference be fostered and striven for and the more sexual will be its form.

The attainment of the goal of adaptation is of such vital importance to the patient that sexuality intervenes as a function of compensation, in order to consolidate a relationship that can no longer be won by the ordinary means of mutual understanding. Under such circumstances the



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transference can thus become the sternest obstacle to a successful treatment. That such vehement sexual transferences to the doctor are especially frequent in the sexually-orientated analysis is not surprising, for a too exclusive concentration of medical interest upon the sexual motive is extraordinarily liable to bar the way of understanding in the crudest fashion for many neurotic cases. An exclusively sexual interpretation of dreams and phantasies is a shocking violation of the patient's psychological material: it is by no means merely infantile-sexual phantasy that he produces, but also a creative accomplishment, which shall make a way for him fully to emerge out of his neurosis. That decent way out is barred to him through the exclusively sexual interpretations. The physician now is the only certain point in a wilderness of sexual phantasies, so that finally nothing else remains but to cling to him with a convulsive erotic transference, unless indeed he prefers to sever himself from his physician in hatred.

In both cases the result is a spiritual devastation. It is especially deplorable under the circumstances, because the psycho-analytical physicians do not in the least desire such an effect; they nevertheless frequently bring it about, through their blind allegiance to the sexual dogma. Naturally, the sexual interpretation is simple and inexpensive of ideas: it concerns itself at the most with a handful of simple basic elements which recur in numberless variations.

One always knows beforehand where the whole matter will finally emerge, "*Inter faeces et urinas nascimur*" remains certainly an eternal truth, but a sterile, a monotonous and above all an unsavoury truth. It is of absolutely no value that every finest striving of the soul should for ever be reduced back *usque ad uterum*; rather is it a gross offence because such a view, instead of building it up, eventually destroys the psychological understanding. Their need of the psychological rapport is, above all, what really concerns the neurotic patients, for it enables them in their dissociated state to orientate themselves ever afresh to the psyche of the physician. It is by no means a simple matter, this relationship to the human object; it is something that can be built up only with great pains and scrupulous awareness. Though of great interest historically and scientifically, the continual leading-back of all projections—and the transference consists of projections—to their origins, serves nothing in the building-up of an attitude of adaptation to life; for it resolves once again to its elements, every attempt on the part of the patient to establish a relationship, thus destroying it.

If, in spite of this, the patient achieves a certain fitness for life, it

can only be brought about by the destruction of many moral, intellectual and aesthetic values, whose loss in a human character one can only deplore. For these are things which absolutely demand and must be granted integrity. Irrespective of this principal offense there is the perpetual reduction, the brooding over the past and the ever-backward glance to things which cannot now be altered; that morbid tendency with so many neurotics to seek always in the past, among their parents, etc., the cause of their inferiority.

But such a minute research into all the ramifications of minor determinants will affect the existing inferiority as little as the present social conditions could be ameliorated by an equally painstaking investigation of the causes of the great war. It is here that the moral accomplishment of the individuality takes its place.

To declare in general that no reductive analysis is needed, would certainly be short-sighted, indeed as unintelligent as to deny all value to the research into the causes of the war. A wholly necessary and even indispensable foundation for a further synthesis is created when the physician gains the deepest possible insight into the origin of his patient's neurosis. But the new synthesis must be definitely begun. As a result of the historical examination, i.e. through the reductive analysis, the patient is removed from adaptation to the present situation through being led back, as it were, to his beginnings. The psyche naturally seeks to make this loss good by a special strengthening of the hold upon the object, generally of course upon the doctor, but sometimes upon someone else at the same time, as, for instance, the husband, or a friend who figures as the doctor's counter-pole. Partly, this is an opportune balancing of the one-sided transference, but partly, as may easily be understood, it is a troublesome obstacle to the progress of the work. The intensified tie to the physician is a compensation symptom for the defective relationship to the present reality. It is this tie that one describes as "transference."

The phenomenon of transference is inevitable in every fundamental analysis, for it is absolutely imperative that the physician should get into close touch with his patient's path of psychological development. Thus only can the physician take into himself the psychological contents of his patient so that his reactions gain an effective contact. One could say that in the same measure as the doctor receives into himself the intimate material of the patient, he himself enters as a figure into the psyche of the patient. I say "as a figure," by which I mean, that at first he is seen by the patient not at all as he is, but more or less he takes

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on the rôle of those individuals who held significance in the patient's previous history. The physician becomes associated in the patient's psyche with those memory-images because he makes him divulge all his most intimate material. He becomes burdened by these images.

The transference consists therefore of projections which stand in the place of a true psychological relationship. Thus the projections make possible a kind of apparent relationship which, however, at a moment when the patient's already existing failure of adaptation is artificially intensified through his analytical removal into the past, is very important. Hence a sudden rupture of the transference is always accompanied by consequences in the highest degree unpleasant and even dangerous, for it maroons the patient in an impossibly isolated and relationless condition.

Even should the transference projections be treated as *mere* projections and be analysed back to their origins—and every form of projection can be thus dissolved and done away with—nevertheless the claim on the relationship still holds good and must be conceded, for without the relationship the patient falls into an absolute void.

He must find the relationship to an object in the living present, for without it he can never adequately fulfil the demands that adaptation makes upon him, or at least, only in a very inferior way. Regardless then of all reduction, his claim will still turn towards the doctor, not indeed as an object of sexual desire, but rather as an *object of human relationship*, of the relationship of one individuality to another, wherein each man is guaranteed his proper place. So long as the projections are not all consciously recognised, such a relationship naturally cannot be attained. The projections must, therefore, before all else, be reductively analysed, provided, of course, that the legitimacy and importance of the underlying claim to individual relationship is constantly borne in mind.

Once the projections are recognised as such, that rapport which one terms the transference is at an end. Here the transference ceases and here the problem of individual relationship begins. To this point every student of analysis may come who has perused the literature on the subject and amused himself in dream-interpretation and unearthing complexes in himself and others. But beyond this point none may go but that physician who either has himself undergone a basic analysis or who brings such modesty and such passion for truth to the work that he can also analyse himself through his patient. Let him who has no wish for the former and cannot achieve the latter not touch analysis; for he will not endure the test, even though he preserve his lamentable conceit for authority.

In the last resort his work is intellectual bluff; how, indeed, can he help his patient out of his morbid inferiority when in the recognition of individual superiority he himself is the first to be found wanting? How can there dawn upon the patient the possibility of relinquishing his round-about neurotic ways, if the physician, playing hide-and-seek with his own personality, cannot, through fear of his own inferiority, relinquish his convulsive clutch at an appearance of worth, authority, competence, superiority, etc.?

The touch-stone of every analysis that has not either terminated in some preliminary stage with a more or less satisfactory practical result or actually come to a standstill without result, is individual relationship, which corresponds to that psychological situation where the man in the patient confronts the man in the doctor upon equal terms, and with that merciless criticism which he inevitably learns from the doctor in the course of his treatment.

The individual relationship is the compact which replaces the transference with its often slavish and humanly degrading dependence, and which makes, for the patient, the first step into a highly valued human existence possible. The individual relationship is for the patient an indispensable bridge; it must serve as a proof to him that his unique personality not only is acceptable but is indeed accepted, and that he himself is now in a position to build up a fully adapted relationship. Naturally, when the physician tries to conceal his personality and his extraordinarily great personal influence behind a method, thus conceding himself the power to scold without question, this can never be the case. So long as this factor is not given its full weight in the reckoning, the method is not so very different from suggestion; the results will also correspond. Instead must the patient have the right of freest criticism and the feeling of human equality of right.

All that I have here said goes to show that, in my opinion, analysis makes far higher claims upon the mental and moral nature of the physician than does the application of a method acquired by routine. And the advancement of the healing effect lies primarily in this higher and more personal achievement of the physician.

But, if one concluded from this that little or nothing lay in the method, I would consider it an unpardonable misapprehension of my meaning. A merely personal sympathy could never provide the patient with that objective understanding of his neurosis which makes him, in a sense, independent of the physician and which erects a counter-influence to the transference depicted above.



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For the objective understanding of the disease, just as for the building-up of a relationship, Science is needed, and not indeed some purely medical knowledge which embraces only a quite limited range, but a general knowledge of every side of the human psyche. The psychological treatment must not only destroy an old, morbid attitude, it must also build up a new, sound attitude. But for this a reversal of vision is needed. Not only shall the patient see from what beginnings his neurosis arose, he shall also be able to see towards what justifiable aims his psychological tendencies are striving. One cannot, as though it were a foreign body, simply extract the morbid element, lest one removes with it an essential piece which, after all, is destined to be lived with. This piece must not be weeded out, but must be transformed till it attains that form which can be included in a way that is meaningful to the whole of the human psyche.

# EXPRESSION OF EMOTION IN CASES OF MENTAL DISORDER AS SHOWN BY THE PSYCHO- GALVANIC REFLEX.

By E. PRIDEAUX.

(FROM WORK CARRIED OUT AT CAMBRIDGE  
FOR THE MEDICAL RESEARCH COUNCIL.)

## (1) *Theoretical considerations as to the meaning of the term 'emotion.'*

THERE is at present no generally accepted definition of the term emotion amongst psychologists, so that it is first necessary to clear the ground as to the meaning we are going to assign to the term. The meaning as popularly understood by the man in the street, as given for instance in the dictionary, is 'a feeling, agitation of mind.' Such a meaning is not in accord with the definitions generally put forward by psychologists. Professor James Ward says: "It has been usual with psychologists to confound emotions with feelings because intense feeling is essential to emotion. Strictly speaking however a state of emotion is a complete state of mind, a psychosis, and not a psychical element, if we may say so"<sup>1</sup>. It has been emphasised also by Professor Stout and at greater length by Mr Shand that emotion does not consist merely in feelings. Shand holds that an emotion is a self or microcosm of the entire mind, including cognitive and conative attitudes as well as the feeling attitude of a peculiar kind. "Emotion," says Shand, "may be used to denote all those forces that are alternating in our minds as joy and sorrow, anger and fear at all degrees of intensity at which they can be felt and recognised"<sup>2</sup>. For Shand, then, emotions are forces and form systems. He distinguishes three parts of the system of the emotion, the emotion itself as subjectively experienced, the processes connected with it in the organism, and its outward expression and modes of behaviour. Moreover he assumes that certain instincts—he defines an instinct "to be an inherited disposition both to be excited by certain stimuli and to respond with a specific kind of behaviour or expression to such stimuli"—are parts of the systems of primary emotions. The only objection to this way of looking at the

<sup>1</sup> J. Ward, *Psychological Principles*, 1918, p. 276.

<sup>2</sup> A. F. Shand, *The Foundations of Character*, 1914, p. 178.

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question is that the term emotion is used by Shand in two different senses,—one is apt to get confused as to whether at one time emotion as a system of forces is referred to, and at another emotion as the part which we feel, the part which is in consciousness and is accessible to introspection.

In contrast to Shand, Professor McDougall regards the primary emotions as parts of the systems of instincts and defines emotion simply as "the affective aspect of an instinctive process"<sup>1</sup>. The difficulties involved in accepting this view have been discussed fully by Shand, and more recently the observations of Professor Lloyd Morgan upon the similarity in the type and intensity of the response in birds at different emotional periods<sup>2</sup> would seem to support Shand's objections. If an emotion is not the affective aspect of the excitement of an instinct, what is that which corresponds most closely to an instinct in consciousness? To this Shand answers—an impulse, and consequent on it the sensations that accompany the subsidiary motor response.

Another view has been put forward by Dr Drever, who holds that the affective aspect of an instinct consists in 'instinct-interest.' "If in any way this normal prosecution of the instinct-interest is checked, tension will arise, a tension in feeling which is emotion"<sup>3</sup>. Drever admits the objections to his theory, which does not appear to account for the origin of the 'joy emotions,' but he gets over this difficulty by pointing out the kinds of circumstance under which tension of feeling is likely to be produced. One of these is when the urgency of the impulse is such that action cannot keep pace with it. In the case of joy the satisfaction is itself stimulating and the situation, which satisfies, at the same time accentuates the impulse by further stimulation, so that the action cannot keep up the pace. Another kind of circumstance under which tension is said to arise is when there is no inherited provision for the precise reaction, which is appropriate to a particular situation, so that the greater the plasticity, the greater the delay in response and the greater the feeling tension or emotion. Drever's definition comes nearer than any other to the popular meaning of the term 'emotion,' and would seem to gain support from experiments on the psycho-galvanic reflex.

There is still to be considered the view which is upheld by the supporters of the James-Lange theory in a modified form, that emotion is

<sup>1</sup> W. McDougall, *Social Psychology*, 1914, 8th edition, p. 46.

<sup>2</sup> C. Lloyd Morgan, "Psychical Selection: Expression and Impression," *Brit. Journ. of Psychology*, 1921, XI, 206.

<sup>3</sup> J. Drever, *Instinct in Man*, 1917, p. 143.

simply the consciousness of the sum total of organic sensations and that it is nothing more than this. If the term 'emotion' is defined in Ward's or Shand's sense then it is obvious that the organic sensations cannot be the cause of the emotion, and, as Ward says, the theory is psychologically and biologically absurd<sup>1</sup>. But if the term emotion is restricted to subjective feelings then we have to admit that the organic sensations form an important part of the subjective experience.

Though we are often justified by our observation of behaviour in making the assumption that there is a definite connection between physical and psychical events as cause and effect, we are not justified in pretending to be able to decide by such observation alone which are the causes and which the effects. As Ribot says, "the study of the emotions from the point of view of pure psychology can come to no definite conclusion. Internal observation however subtle can only describe the internal fact and note its gradations; regarding the conditions and genesis of emotion it can give no answer; it can only seize a bodiless emotion, an abstraction"<sup>2</sup>.

But that the organic sensations are not responsible for the whole of the subjective feeling experienced seems certain from recent psychophysiological experiments<sup>3</sup>. And in addition to the objections which have hitherto been raised, a very serious objection, it seems to me, is the fact that the emotion is subjectively experienced before there is time for the visceral changes to occur. This objection does not hold good for muscular sensations, but it seems to be possible to elicit emotion in some subjects without any visible muscular movements, so that in such cases we can claim on the hypothesis of the James-Lange theory that most of the sensations should come from the skin and viscera, and it is on these that James relied most for his theory.

Now we know from our experiments with the plethysmograph and psycho-galvanic reflex that there is an average latent period in both of 2-3 seconds before the peripheral reactions are manifest, and that the subject experiences his feeling of emotion some time before these reactions occur. This objection is still more obvious in the case of the viscera. The secretion of the adrenal gland, which plays such an important part, according to Cannon, in the physiology of the emotions does not occur for some seconds—Cannon says: "the latent period of adrenal secretion when the splanchnic nerve is stimulated below the diaphragm is not

<sup>1</sup> *Op. cit.* p. 275.

<sup>2</sup> Th. Ribot, *The Psychology of the Emotions*, 1911, 2nd edition, p. 93.

<sup>3</sup> See *American Journ. of Psychology*, 1919, vol. 48, p. 285.



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longer than 16 seconds." And further Pavlov has shown that the latent period of the gastric psychic secretion is five minutes<sup>1</sup>. It seems most improbable that sensations due to organic changes could make themselves felt in consciousness as an emotion so long before any manifestation of such changes appeared at the periphery.

There seems then to be no doubt as to the fact that some psychical excitement precedes the physical changes and that this is of a specific kind corresponding with different situations. But if we accept Shand's or Drever's views, can we say how much of this excitement is emotion, and how much is due to impulse or instinct-interest, and can we say that the true emotion only makes its appearance when the visceral sensations make themselves felt in consciousness?

An attempt to answer these questions involves us in the difficulty that apart from introspection we have no evidence as to this excitement, and we are led to ask another question—how far can we accept the outward manifestations as indicative of subjective feelings? It seems to have been more or less assumed by psychologists that the strength of the manifestations, in the absence of conventionalism and deceit, indicates the amount of feeling produced. Professor J. Ward, for example, writes: "The intenser the feeling, the intenser the reaction no doubt, whether it be smiles or tears, jumping for joy or writhing in agony"<sup>2</sup>.

In contradistinction to this, the question I would ask is as to whether the so-called emotional or hysterical persons really feel any emotion at all. Are their emotions only artificial and their expressions simply mimetic? Can we in fact go further and apply these questions to healthy persons and say how far the muscular expressions are merely mimetic, and how far they really indicate the subjective experience of emotion?

James briefly referred to this point in a footnote: "I am inclined to think that in some hysteriform conditions of grief, rage, etc., the visceral disturbances are less strong than those which go to outward expression. We have then a tremendous verbal display with a hollow inside. Whilst the bystanders are wrung with compassion or pale with alarm, the subject all the while lets himself go but feels his insincerity, and wonders how long he can keep up the performance"<sup>3</sup>. Janet in his *Mental State of Hystericals* was of the same opinion, for example "their emotions which seem so violent are not just," and "there is very often but little real feeling connected with these loud cries and this great despair." Are James

<sup>1</sup> E. P. Cathcart, "Psychic Secretion," *Journ. of Mental Sci.* 1919, LXV. p. 180.

<sup>2</sup> *Op. cit.* p. 277.

<sup>3</sup> W. James, *Principles of Psychology*, 1890, II. p. 461.

and Janet justified in their contention that these subjects experience little or no emotion and that the emotion in such cases is artificial? To this the psycho-analytical school would give a decided answer in the negative. For this school the inadequacy of the reaction is only apparent, the emotion is perfectly genuine but is overdetermined by displacement, and the hysteric is reacting in reality to an old situation which has been made significant for him by some bond of association aroused by the situation immediately responsible for the reaction. Allowing that this mechanism occurs more often than is generally recognised, there still remain a number of cases which cannot be explained by this process unless we so stretch the point that it loses all value as an explanatory assumption. In these cases it may perhaps be possible to hold with Janet that the emotion is artificial, if one restricts the term emotion to subjective feeling as James and Janet appear to do, for it is true at any rate, as my experiments show, that the visceral expression in these cases is very small or is even non-existent.

In dealing with this question of expression we must first decide the relative values we are going to assign to the different manifestations. We know that in the so-called expression of emotion both the central and autonomic nervous systems play their part. That is to say, expression is partly by the contraction of voluntary muscles, 'muscular expression,' and partly by glandular secretions, contraction of involuntary muscles, vasomotor and visceral reactions, all of which I include under 'visceral expression.' And, whereas visceral expression occurs automatically and independently of any direct control, muscular expression on the other hand varies directly with the amount of voluntary control and can be entirely inhibited.

Now I would agree with Shand that an instinct may be excited without involving an emotion, but that an emotion is incapable of being excited without involving the excitement of some instinct. It would then seem necessary to distinguish how much of the consequent behaviour or muscular expression is due to emotion and how much to instinctive impulse, and how much of the subjective feeling is due to emotion and how much to the sensations set up by muscular reactions evoked in the carrying out of the impulse.

We must then allow that part of the muscular expression may be indicative possibly of subjective feeling, and that part may be certainly an instinctive reaction, the carrying out of the impulse, perhaps a 'pseudoaffective reflex' as Sherrington calls it, released from inhibition. This view gains support from the experiments of Professor Sherrington

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on decerebrate cats. Sherrington describes in the decerebrate cat amongst other motor reactions some mimetic movements simulating expression of certain affective states, but he could never evoke such mimesis as might, had the cerebrum been present, have been indicative of pleasurable sensation. Pagano reports that in the dog, deprived of its cortical functions, he got mimetic expressions of both fear and anger<sup>1</sup>. And Goltz's dog also showed expression of anger without any signs of other emotions. Goltz argued from this that the other emotions seemed to demand higher nervous organisation than did anger. Observations on infants seem to confirm this view, for there do not seem to be any clearly defined expressions indicative of pleasure in the new born babe—laughing aloud, for example, did not occur in one of my children until the eighth week, whereas expressions of displeasure were certainly present at birth, and reflex starting at loud noises occurred during the first week. In reference to Goltz's argument as to anger Sherrington states: "Be that as it may, the retention of its expression by Goltz's dog indicates that by 'retrogradation' the complex movement of expression has in certain emotions passed into a simpler reflex act. . . . The impulsive movement has in this case become an automatic reflex no longer necessarily combined with the psychical state whence it arose"<sup>2</sup>.

The nerve centres of mimetic expression are said by some to have their seat in the optic thalamus, but as Sherrington points out various grades of mimetic expression exist, and some seem phylogenetically much older than others; observations on hemicephalic children and Sherrington's experiments in which part of the optic thalamus was removed point to the conclusion that in some reactions neither the fore-brain nor midbrain are necessary. It seems justifiable therefore to make the speculation, as Head and Riddoch have done, that the 'flexion-reflex' and the 'mass reactions' in cases of traumatic lesion of the spinal cord are of the same nature as the mimetic expressions in decerebrate animals, that they are pseudoaffective reflexes of a much earlier stage of evolution. And it might even be possible to speculate further, in conformity with Pierce Clark's views on epilepsy that the fit is a regressive phenomenon, and so ascribe the epileptic convulsions to the re-awakening of certain pseudoaffective reflexes, much in the same way that Babinski's extensor response reasserts itself when cut off from the inhibition of the cerebral cortex by lateral sclerosis, though in order to uphold such a view it would be necessary to assume that the stimulus

<sup>1</sup> *L'Année Psychologique*, 1914, p. 483.

<sup>2</sup> C. S. Sherrington, *The Integrative Action of the Nervous System*, p. 267.

which sets up the reaction is also responsible for removing the inhibition.

These considerations point to the conclusion that muscular expression is no indication, at least as far as the coarser emotions are concerned, of the subjective feeling experienced, for it would seem to be justifiable to make the assumption that decerebrate animals do not in fact experience any such feeling. It is at least certain that the amount of muscular expression is intimately related to the strength of the cortical control which is brought into play. Given the same strength of subjective feeling the person with no powers of inhibition may give vent to an explosive outburst, whilst the one with a higher development of self control will give no outward expression at all, and in the same person the discriminative and inhibitory functions of the cortex vary from time to time, depending largely on physical factors, such as fatigue and the influence of hormones, endocrines, drugs, alcohol, etc. But it is also true that the muscular expression depends on the strength and duration of the impulse, so that Spencer insisted on "the general law that feeling passing a certain pitch habitually vents itself in bodily action and that nerve force takes first the most habitual routes." That is, that it expresses itself first in the voice and muscles of the face and hand. Spencer's law however would seem to be a one-sided explanation as it does not take into account the question of control, unless we agree to accept McDougall's drainage theory of inhibition. For we recognise that the first functions in the central nervous system to become deranged in mental disorders are those that have developed last from the evolutionary point of view, the higher centres involving the discriminative and inhibitory functions are affected first, and it would seem that Spencer's 'habitual routes' are the last to develop as methods of expression and are less under the influence of control.

It would appear then that the term 'emotional' as popularly used is incorrect. The persons to whom we ascribe this term are really persons who have little or no control over their muscular expression—they should rather be called 'impulsive.' The converse question as to whether emotion can be subjectively experienced without any muscular expression we can answer in the affirmative from our own introspection. And as Shand says "the arrest of an instinct is that which most frequently excites the emotion connected with it—there is no anger so intense as when the blood boils and all the sudden energy that comes to us cannot vent itself on our antagonists"<sup>1</sup>.

<sup>1</sup> *Op. cit.* p. 189.



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This brings us back to Drever's conception that emotion only occurs when an instinct is checked and tension arises. More recently Carver has expressed a similar view and defined emotion "as the subjective experience which develops when gratification of the instinctive impulse is held in check by higher level control"<sup>1</sup>. He quotes in support the observation of Romanes that the lower the mental development of the organism, the more fixed and definite becomes the instinctive reaction and the less becomes the manifestation of emotion. The truth of Romanes' statement depends on the meaning given to 'manifestation of emotion.' If by manifestation of emotion is meant only visceral expression then it seems to be perfectly true, for experimental results show that the lower the mental development the greater is the muscular expression and the less the visceral expression, provided that we are justified in regarding the psycho-galvanic reflex as an indication of the visceral expression of emotion.

All therefore that we are entitled to say is that the muscular expression of emotion cannot be treated as a separate problem divorced from the question of control. It certainly seems as if the processes of inhibition and facilitation are the fundamental problems. So that when we return to our original question as to whether the so-called emotional or hysterical persons—really impulsive persons—subjectively experience any emotion, we can only answer, on the evidence of muscular expression and the behaviour of deerebrate animals, that it is quite as justifiable to assume that they do not as to assume that they do. And we are left only with the visceral expression which is not under voluntary control to answer our question.

We have then to ask—Are we justified in assuming that the amount of visceral reaction is an indication quantitatively of emotional excitement and subjective experience? This question is better left for discussion in connection with my experimental results. I would like to be able to maintain that we are so justified, but there are difficulties in applying this assumption. It seems certain at any rate that the emotion gains in intensity from the consciousness of visceral sensations and a way out of the difficulty might be to restrict the term emotion so as to make it include only the central psychical excitement together with the sensations from visceral expression, and to exclude muscular expression as being due to instinctive impulse.

This seems to be the most profitable view to take as an explanation

<sup>1</sup> A. Carver, "The Generation and Control of Emotion," *Brit. Journ. of Psychol.* 1919, x. 52.

of the facts, and I would therefore accept with some reservations the definitions of emotion as given by Drever and Carver. But in order to be a little more explicit I will anticipate my experimental results and will provisionally describe emotion as "a subjective feeling, consisting of central excitement and consciousness of peripheral sensations, occasioned by situations which powerfully oppose or facilitate the aim of any instinctive impulse."

(2) *Experimental Results.*

For the purpose of studying the visceral expression of emotion I have been experimenting with the so-called psycho-galvanic reflex. Before deciding as to how far we are justified in assuming that we can measure the intensity of an emotional reaction by this method it is necessary to set out the results of my experiments.

There are two methods of obtaining the psycho-galvanic reflex, that originally reported by Féré in 1888 due to apparent change of resistance in the skin when a weak electric current is passing through the body, and that reported by Tarchanoff due to production of an electromotive force when no external current is being used. And of these two methods it has been demonstrated by other investigators that the use of the current by Féré's method is the more reliable for measuring emotional reactions<sup>1</sup>.

I am indebted to both Professor Waller and Dr F. L. Golla for help and instruction in the technique of this method, and it is with Féré's phenomenon that all my experiments have been concerned.

The technique I employed originally was that described by Waller<sup>2</sup>, in which the subject is placed in the fourth arm of a Wheatstone bridge and his resistance determined by balancing out in the third arm. I have used a Paul's 'Unipivot' galvanometer, which has an internal resistance of 830 ohms, and as electrodes either saline baths or zinc discs, covered with lint soaked in saline, which are bandaged on to the palm and dorsum of the hand. I soon found that no reliable work could be carried out without photographic records, and for this purpose I adopted a method suggested by Professor A. V. Hill for the photographic recording of the heat production of muscles<sup>3</sup>.

As a source of light for the galvanometer I use a 4-volt lamp, and as the light is reflected from the mirror of the galvanometer it is passed

<sup>1</sup> F. L. Wells and A. Forbes, "On certain electrical processes in the human body and their relation to emotional reactions," *Archives of Psychology*, 1911, no. 16, p. 25.

<sup>2</sup> *Proc. of the Royal Society*, 1919, B. vol. 91, p. 17.

<sup>3</sup> A. V. Hill and W. Hartree, "Photographic recording of the heat production of muscles," *Journ. of Physiology*, 1920, LII. no. 5, p. lxx.

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through a wide reading lens and brought to a focus, about the size of a pin's head, on to a kymograph, to which sensitive bromide paper is attached. The kymograph is adjustable as to speed and worked by clock-work, and has a small signal lamp attached to its framework. The lamp allows for a streak of light being projected on to the bromide paper for use as a stimulus signal, and this signal lamp is worked synchronously with the contact for the stimuli which can be given electrically, *e.g.* the ringing of a bell, flashing a light, a motor horn, releasing a weight, and giving a faradic shock. Time marking is indicated by a shutter working on an electro-magnet connected with a Brodie's clock, by means of which the light can be cut off at regular intervals, so that the time is indicated on the galvanometric curve itself.

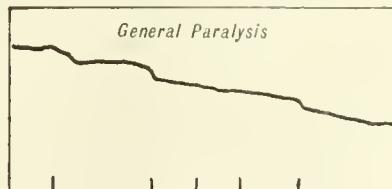
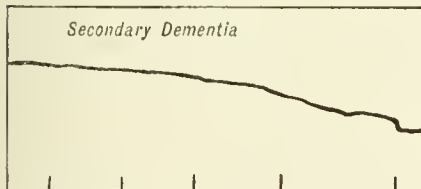
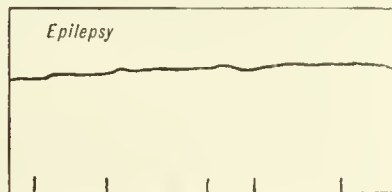
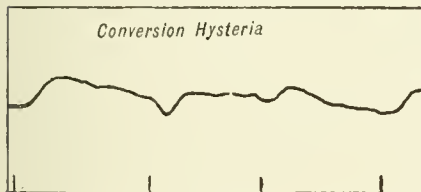
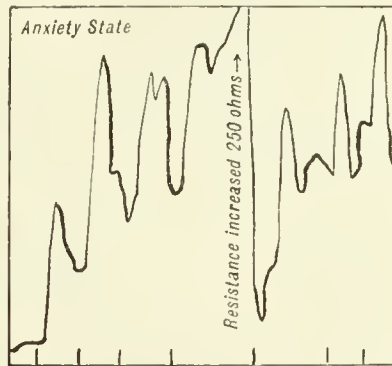
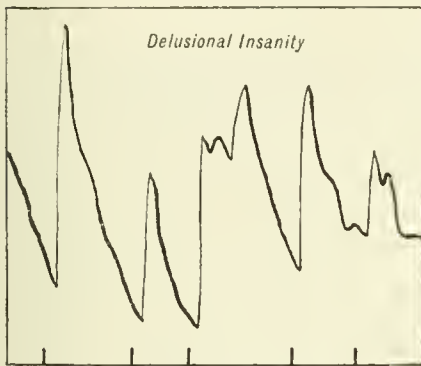
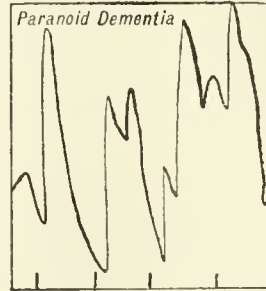
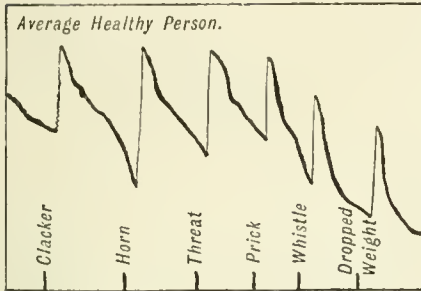
This method allows of a continuous photographic record being taken over a period of half an hour, and by the use of an additional apparatus for rolling the paper off cylinders on to the kymograph, the record may be continued for 2-3 hours, or more. I am now using this method of getting simultaneous records of reactions from different parts of the body by reduplicating my Wheatstone bridge and galvanometer circuits.

Reproductions of photographs taken in this way are shown in the figures attached. A rise in the curve indicates a decrease in the apparent resistance of the skin—the method of time marking is indicated in the interrupted curves, the interruptions having been made every second, and the stimulus signal is indicated by the mark below the curve.

In a recent number of *Brain*<sup>1</sup> I have given a lengthy review of the work of previous investigators on this subject and of the problems involved. It has been definitely established that galvanometric deflections can be produced by certain psychical, physical and physiological causes, and it is agreed that the genuine galvanic reflex occurs only after a latent period of an average of two to three seconds following the stimulus, and that the most marked reactions are obtained either from the palms of the hands or the soles of the feet. There is still a controversy as to the physiological factors responsible for the reflex, and until these are ascertained we shall not be able to make much progress as to its clinical value. It is claimed by some observers that the reflex is due to the activity of the sweat glands, and those who maintain this view have reported experiments to show that the reflex can be abolished by the subcutaneous injection of atropine. It may be that these observers were dealing with secretory currents, for Waller has shown quite clearly that atropine does not abolish the much larger reaction obtained by Féré's

<sup>1</sup> E. Prideaux, "The Psychogalvanic Reflex: A Review," *Brain*, 1920, XLIII. p. 50.

*Psycho-galvanic Reflex—Typical Reactions (from photographic records)  
in cases of Mental Disorder*





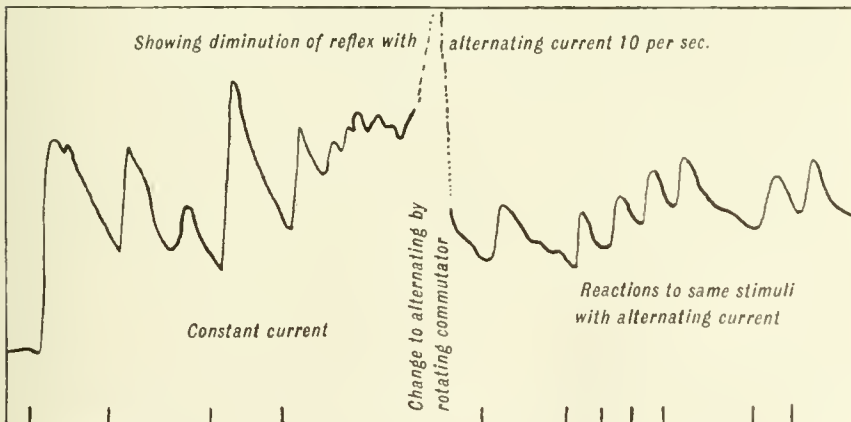
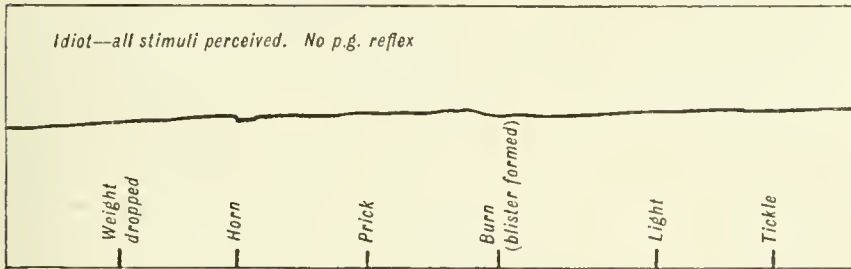
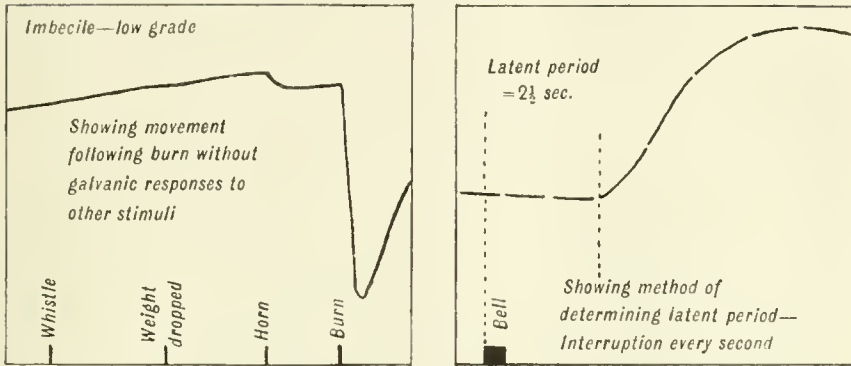
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method. But, as Mr Barcroft has suggested to me, Waller's experiments do not disprove the fact that the activity of the sweat glands may be responsible for the reflex. Barcroft has shown that there is a subliminal degree of functional activity in the case of the submaxillary gland, and that there is increased metabolism on stimulation of the chorda tympani in the atropinised submaxillary gland without flow of saliva, as shown by the increase in oxygen percentage, and it is probable that in the same way the subliminal activity of the sweat glands may not be suppressed by atropine. If this can be shown to be the case it would be in accord with what we know of the physical nature of the reflex.

The difficulty in interpreting the results of different observers is that they have been obtained under varying electro-physiological conditions. In order to get records which will be directly comparable in different classes of patients it is essential to have as constant a set of physical conditions as possible.

Experiments which I have carried out on the physical nature of the reflex show definitely that the reflex is a polarisation effect. The result of passing a constant current through the skin is that a polarisatory resistance is set up, and it is this polarisatory resistance which is diminished as the consequence of an emotional reaction. Experiments which I am now doing with Mr P. Blackett at the Cavendish Laboratory point to the fact that the skin and electrodes as a whole act very like a secondary cell of very small size, and that when using high frequency currents from a valve circuit polarisation is not abolished until the alternations reach 5000 per sec. That the reflex is not due to a production of an electromotive force of muscular origin is shown by the fact that the reflex, though much smaller, still occurs with the alternating current and can be shown quite easily on a vibration galvanometer with alternations of 400 per sec., but it gradually diminishes and becomes inappreciable with higher frequencies, in spite of the fact that as the frequency increases the resistance diminishes and the current therefore becomes much greater. Diminution of polarisation also occurs as a result of diminishing the strength of the current passing through the skin, and the reflex diminishes *pari passu* with this diminution. To get comparable results therefore it is necessary to arrange for all the factors causing polarisation to be as constant as possible—the strength of current in each case, the electrodes, the strength of the saline and the area of the skin acted upon must all be the same.

Therefore in the constant method I have discarded my arrangement of electrodes in saline baths, as the area of skin acted upon by the

*Psycho-galvanic Reflex Reactions from photographic records*

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current varied according to the size of the hands or feet, although this arrangement gives a better contact. I now use the same zinc electrodes covered with lint soaked in a stock solution of gramme molecular saline.

The electrodes are kept in position by firm bandaging over rubber sheeting, which acts as an insulator and also prevents evaporation. There appear to be considerable differences, which can be shown by taking simultaneous records, in the reactions of the two hands in some individuals, and so I always use the same hand—the left—and I always fix the electrode acting as anode to the palm. To prevent movement the limb is fixed to a splint, but in those cases where I wish to use the galvanometric deflection as an indication of movement—as an indicator of muscular expression—I use the saline bath electrodes. In that case the deflection is in an opposite direction, if in the first instance the hands are squarely placed flat on the bottom of the dish, and is due to an increase in actual resistance caused by a withdrawal of the hands from the solution, and it can be further distinguished from a genuine psychogalvanic reflex by the fact that it takes place almost immediately after the stimulus. In the use of the electrodes by the palm-dorsum method great care has to be taken to ensure good contact. I have my electrodes slightly moulded to fit accurately, but the method is not altogether satisfactory, and, although I have tried different forms of semi-liquid electrodes, I have not been successful as yet in devising any better arrangement, which is at the same time convenient for practical use. It is also necessary to have a constant E.M.F. as the source of the current and for this purpose I use a 2-volt accumulator. To ensure a constant strength of current, the same milliamperage in every case—I find 0.3 milliamperes to be a convenient strength for recording purposes—I now put in an additional rheostat and milliampere meter in series with the patient, keep the third arm of my bridge constant, and vary the resistance in my additional rheostat to balance with the constant in the third arm. This method would appear to give as constant a set of conditions as is practicable. With the arrangement as used by Waller the milliamperage varies with the resistance of the patient, so that the less the resistance the more marked appears to be the psycho-galvanic reflex. And as the resistance as measured by Waller does not correspond to any reality but is composed of actual resistance plus polarisatory resistance, this total apparent resistance varies with the strength of the current and his results are only comparable after a more complex calculation.

The first difficulty in comparing the reactions of different individuals is that it is impossible to decide on a normal, and the second is that

variation in the same individual at different times is very considerable. As a result of previous work I had noted that healthy persons could be divided into three classes according to their galvanic reactions: (1) those who reacted by muscular movement and gave very little genuine galvanic reflex, (2) those who gave a marked psycho-galvanic reflex and very little indication of muscular movement, (3) the phlegmatic group who gave very little or no response at all of either kind. It would seem that the impulsive persons come into the first group and the 'tender-minded' of James into the second. But it appeared that the same individual might almost come into each one of these groups at different times according to his condition. The difficulties in determining the factors responsible for this variation in the same individual are very considerable. The galvanic reflex is certainly diminished as the result of fatigue, and this was very noticeable during the recent heat wave; in a series of experiments in two subjects it has been diminished during menstruation, and Mr Whately Smith's experiments show that it may be diminished after alcohol—it seems to be increased during a condition of general vasodilatation, though the local cutting off of the blood supply to the parts connected with the electrodes has no effect, and it is increased by a state of hyperthyroidism. One of the difficulties in experimenting with the same individual is that after a time he begins to get indifferent and fails to react, so that I have done a series of experiments, in which only one experiment has been performed in each case. And as it seemed that more information would be forthcoming in cases definitely abnormal, I have done this series in persons suffering from mental disorder and psychoneuroses. I am indebted to Dr M. A. Collins of Chartham Mental Hospital and Dr Archdale of the Cambridge Mental Hospital for allowing me the facilities and giving me the necessary information to enable me to conduct these experiments. I have experimented by the Constant method, using a current of about 0.3 milliampere, on 146 patients (140 male and 6 female—male patients are perhaps more constant, as the possibility of the influence of menstruation has not to be taken into account) and on 25 healthy male persons under the same conditions to act as controls—total 171 subjects, and photographic records have been taken of the reactions in each case. Each case has been subjected to 5 or 6 stimuli—(1) whistle, (2) dropping weight, (3) motor horn, (4) flashing of light, (5) threat to prick, (6) Dalby's clacker, and the average of the responses in each individual in terms of the absolute decrease in ohmic resistance is taken to indicate the sensitivity for the galvanic reflex in that particular individual.



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*Psycho-galvanic Reflex in Mental Disorders. (171 subjects)*

*Showing absolute change in decrease of ohmic resistance with current of 0.3 milliampère*



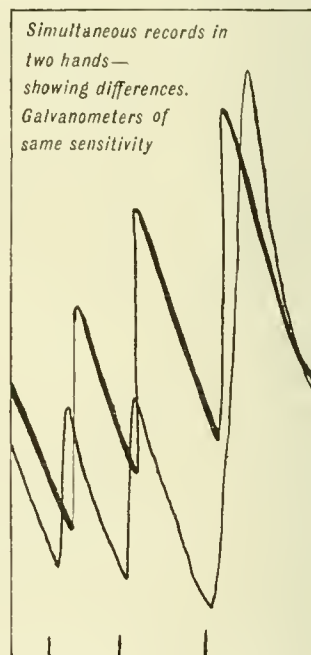
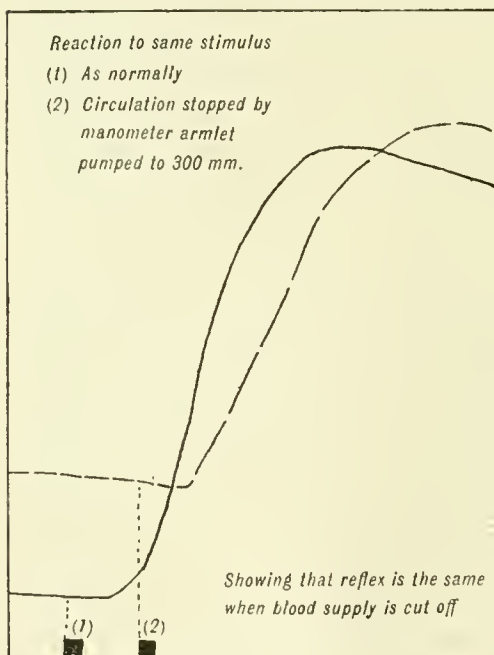
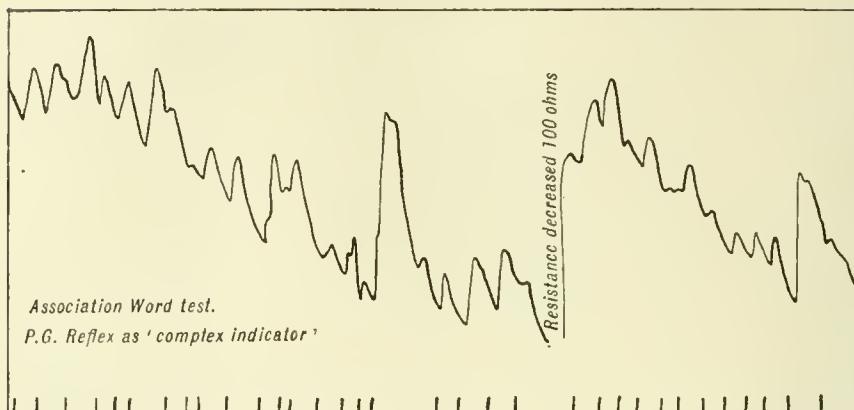
The cases are put into classes according to the nature of the mental disorder, as far as it is possible to pigeonhole them, and the average for each class calculated.

The results work out as follows:

No. of cases	Class	Average decrease in resistance in ohms.
25	Healthy persons	100
15	Anxiety states	90.9
7	Paranoid dementia	80
10	Delusional insanity	71.1
7	Conversion hysteria	36.3
10	Manic-depressive insanity	31.8
20	Epilepsy	30
19	Dementia praecox	27.2
24	Secondary dementia	13.6
14	Imbeciles	13.6
17	Idiots	6.8
3	General paralysis	0

In the case of the 17 idiots, 12 gave no galvanic reaction at all in spite of the fact that in all except two the stimuli were certainly perceived, as evidenced by marked muscular responses of a reflex character. So also 4 imbeciles, 16 cases of secondary dementia, 6 of dementia praecox and 10 of epilepsy gave no reflex. It is to be noted that though the differences between some of the classes are slight, the classes can be put into three groups: (1) healthy persons, cases of anxiety states and paranoia, (2) cases of conversion hysteria, manic-depressive insanity, epilepsy and dementia praecox, (3) demented, imbeciles and idiots. There was considerable variation in the initial resistances in individual cases, varying from 6800 ohms to 700 ohms, but apart from the epilepsy group there were no characteristic differences between the classes. In the case of the epilepsy group the resistances were much lower—the average initial resistance in the 20 epileptics was 1500 ohms, whereas the average resistance in the remaining 151 subjects was 2550 ohms. There was no relation between the strength of the galvanic reflex and the resistance of the skin in different individuals as determined at the beginning of the experiment, as Waller seemed to think was the case. Such a relation may occur and probably does in the same individual because the apparent changes in resistance, for example the diurnal variation reported by Waller, seem to be changes only in polarisatory resistance and it is only within the range of polarisatory resistance that a reflex is possible—there is no variation in actual resistance when determined by the high frequency method.

*Psycho-galvanic Reflex Reactions from photographic records*



As these experiments suggested that the psycho-galvanic reflex was conditioned by the state of the cerebral cortex, I did two experiments in association with Dr Adrian on cats—one on a spinal cat and one on a decerebrate cat—and although the experiments were not very satisfactory on account of the difficulties of movement there was certainly no evidence of any galvanic reflex at all. That the reflex occurred in normal cats was shown by Veraguth, who also demonstrated that it was abolished during ether narcosis. The reflex has also been reported by some observers as occurring in normal frogs, but I could not obtain any reflex from decerebrate frogs. I also investigated in all these patients the question of dermatographia, but no correlations could be obtained between it and the psycho-galvanic reflex—its intensity and time of appearance varied quite irregularly and it might be just as well marked in an idiot as in a healthy person.

### (3) *Interpretation of Experimental Results.*

The first question to be considered is as to how far the psychogalvanic reflex is an indication of an emotional reaction. The only way of deciding this point is to compare the strength of the galvanic reflex with the intensity of the emotional experience as introspectively observed. The difficulty here is to get subjects who are trained introspectionists—when experimenting with the reflex as a ‘complex’ indicator in word association tests I found it almost impossible to rely on the introspections of the subject. The experiments of Wells and Forbes<sup>1</sup> and those of Whately Smith<sup>2</sup> and others point to the conclusion that the strength of the reflex and the intensity of the emotion are closely related—Wells and Forbes state: “Taking into account the inaccuracies of introspection, as well as the sources of error remaining in the experimental method, these results seem to show that in central tendencies a fairly close relationship exists between the intensity of the objective reaction and the electrical disturbances in the tissues involved.” It is however certain that in some sensitive subjects, and some of these have been trained introspectionists, a galvanic reaction occurs without any emotional experience as introspectively observed, but it is also true that in these subjects the strength of the reflex has corresponded pretty closely with the intensity of the experience. So that we can probably allow that for crude emotions at any rate the psycho-galvanic reflex is in the same individual at the same

<sup>1</sup> *Op. cit.* p. 26.

<sup>2</sup> W. Whately Smith, “Experiments on Memory and Affective Tone,” *Brit. Journ. of Psychol.* 1921, XI. p. 236.



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sitting an indication of his subjective experience. But this does not allow us to draw the conclusion that because *A* gets a greater reflex than *B*, therefore *A* experiences a greater intensity of emotion. It is here that introspection fails us as a method of comparing one person with another. For it is just those persons of the impulsive and hysterical type who should be able to give the most valuable information but who fail so completely when it comes to introspection. But I have been able to obtain some information on this point by experiments on the same individual at different times and under different conditions and it certainly seems as though at some times a person is able to experience considerable feeling, at any rate momentarily, without giving a very large galvanic reaction and at others that he will give a large galvanic reaction with only a very small amount of emotional experience or possibly with none at all. Moreover the differences to be observed in the reactions of the two hands as recorded simultaneously to the same emotional stimulus in some persons—and in a recent experiment the reaction in the left hand was three times as great as the reaction in the right—suggest that the condition of the skin is the important factor, unless we can assume differences in the optic thalami, as in the case of those patients reported by Head and Holmes with a lesion of one optic thalamus, who seemed to express their emotions on one side of the body only. Experiments on patients with lesions of the optic thalamus would throw much light on the subject from this point of view. The fact that the galvanic reaction is only obtained to any appreciable amount from the palms of the hands and soles of the feet shows the importance of the skin factor, but one would not have expected that there should be such marked difference between the palms of the two hands in persons who do no manual labour. Granted that the reactivity of the skin is the important factor, it becomes necessary to know what are the factors influencing this reactivity. On the one hand the skin does not react and there is no reflex because no emotion is aroused, and on the other the skin fails to react in spite of the emotion apparently aroused. The psycho-galvanic reflex by itself only gives us information as to the reactivity of the skin and cannot as yet, unless we accept the James-Lange theory, which we have already rejected on the grounds of the latent periods of visceral reactions, be regarded as giving information as to emotivity. But the skin reaction is only one of the objective reactions to emotional stimuli, and galvanic reflex experiments must therefore be correlated with other methods of determining quantitatively the visceral changes. I have had the opportunity of comparing my psycho-

galvanic reflex results with some of the results obtained by Dr Mira of Barcelona on blood pressure changes following emotional stimuli, as shown by Pachon's method, and Dr Mira tells me that although he has not done so many observations his results on cases of mental disorder are of the same order as my psycho-galvanic experiments. It therefore seems probable that the reactivity of the skin is closely related to the reactivity of the autonomic nervous system as a whole, although the condition of the skin itself may account for local differences.

If it was only a question of autonomic reactivity then it might be possible to explain some of my results, the small reaction in cases of conversion hysteria as compared with the large reaction in cases of anxiety hysteria for example and the difference between the reactions of tough-minded and tender-minded persons, on the assumption that those who gave a large response had an exaggerated sensitivity of the sympathetic nervous system, and the strength of the reflex in cases of hyperthyroidism would support such a view. And it might be that a small reflex corresponded with the 'vagotonic' disposition of Eppinger and Hess and a large reflex with a 'sympathicotonic' disposition.

But as Langley has shown the sympathetic system cannot give true reflexes without the intervention of the central nervous system and until we know more about the interaction between the autonomic and central nervous systems we cannot interpret our results satisfactorily. My experiments certainly suggest that the psycho-galvanic reflex is conditioned by the state of the cerebral cortex. In those classes of patients where we have definite evidence of cortical degeneration or maldevelopment there is only a very small or no reflex at all, in those cases where organic changes in the cortex are probable and also in conversion hysteria there is only a comparatively small reflex, and in others in whom there is no evidence of cortical change there is a much larger reflex. But healthy persons may give under different conditions a reaction which varies from one very much in excess of the average to one which is not much larger than that of an idiot. I noted in my review<sup>1</sup> that the reactions in subjects of poor intellect, as evidenced by their low standard at school, were rarely so marked as in my intellectual subjects, and Miss M. D. Waller as a result of her investigations on seventy-three medical students, concluded that intellectual efficiency, as judged by examination results, was associated with higher nervous sensitiveness in the psycho-galvanic reflex. Although this is true all one can say is that a high reflex does not occur in those who are intellectually inefficient but a low reflex does not neces-

<sup>1</sup> *Brain*, 1920, LXIII. p. 69.

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sarily indicate intellectual inefficiency. In a paper on the relation of the psychoneuroses to mental deficiency<sup>1</sup> I showed the liability for those who had been in the lower standards at school to suffer especially from conversion hysteria and for those who had reached the higher standards to suffer from anxiety states. Amongst my military in-patients of those who had not reached higher than standard III, 82 per cent. suffered from conversion hysteria, whilst of those who had reached standard VII only 6 per cent. suffered from conversion hysteria and many of these were of the fixation hysteria type. The difference therefore in the galvanic response between the cases of conversion hysteria and anxiety states, which in other experiments, not carried out by the constant method and therefore not strictly comparable with this series, has been even more marked, may be due to some inherent lack of development of the cerebral cortex. That the failure of the galvanic reflex is not necessarily due to want of psychic elaboration of the stimulus is shown by the fact that in those cases, in whom the psycho-galvanic reflex is small or non-existent, the deflections due to physiological causes—coughing, yawning, etc.,—are equally small or non-existent. One explanation of the absence of the reflex in cases of cortical degeneration would be to assume that the psycho-galvanic reflex was an associative reflex in Bechterew's sense, and that the visceral organs have a cortical representation as Bechterew has tried to show, but no further evidence has been forthcoming to support this view and most authorities seem to be against it.

Whatever the correct interpretation of the results may be we must regard the cerebral cortex as being an important factor in the determination of the psycho-galvanic reflex. And since Head and Holmes have shown the chief functions of the cortex to be of an inhibitory and discriminative nature, we are entitled to conclude that apart altogether from the question of autonomic reactivity the psycho-galvanic reflex will not occur unless the inhibitory functions of the cortex are stimulated. These results support the view which I tentatively put forward in a paper on "Suggestion and Suggestibility"<sup>2</sup> that "the psychogalvanic reflex may be an indication of the contrary or epicritic forces stimulated by the liberated emotion, and that it is not merely an emotive response." That the state of the skin is merely conditioned by the state of the cortex might be a possibility, and perhaps the psycho-galvanic reflex experiments alone do not entitle us to assume anything more than that, but this would not account for the results of Dr Mira's experiments. And

<sup>1</sup> E. Prideaux, *J. of Neurology and Psychopathology*, 1921, vol. II, no. 7.

<sup>2</sup> E. Prideaux, *Brit. Journ. of Psychol.* 1920, x, p. 228.

moreover the relation between the muscular expression and the visceral expression—the fact that, when some central excitement is aroused and much muscular movement reflexly results, there is very little galvanic response whilst on the other hand the suppression by reflex inhibition of the muscular reflex is accompanied by a large galvanic response—points to the conclusion that it is the inhibitory functions of the cortex, which condition the reflex. We can probably allow that the psychogalvanic reflex is a criterion of the visceral changes consequent on emotion, though there may be specific visceral reactions in some people to specific emotions, as we know that each person has his particular predisposition.

So that we can infer that a psycho-galvanic reflex and therefore visceral changes occur when an instinctive impulse is aroused—that is physiologically when the optic thalamus is stimulated—and when at the same time the impulse is reflexly inhibited from within or stimulates the discriminating functions of the cortex, but we cannot say that the converse is true, that the absence of a galvanic reflex necessarily means a lack of inhibition, as it may also indicate a diminution of reactivity of the skin or autonomic nervous system.

We can say therefore in the case of the idiot that no visceral changes occur because of the lack of inhibitory functions of the cortex, or at any rate of some factor associated with it, but we cannot say this definitely of the classical hysteric. When however the fact, that the average hysteric is shown to be of a lower mental development, is taken into account his lack of visceral response would appear to be due to the same cause.

And since we have found that visceral changes may occur without arousing an emotion, and that some central excitement can be aroused without producing visceral changes, we cannot infer that a person who gives no galvanic reflex experiences no kind of emotion. It would seem impossible to distinguish the central excitement properly belonging to an emotion from that which is merely instinct-feeling accompanying an impulse, but it seems certain that the emotion gains at any rate in intensity and duration from the consciousness of visceral sensations and that unless the central excitement is so reinforced it expends itself in the satisfaction of the impulse by muscular expression and leaves no feeling remaining which can be called an emotion. This central excitement part of the emotion is only momentary and disappears almost as soon as it is aroused unless it is reinforced by the visceral sensations. From this point of view it would appear that James and Janet were right in holding that the emotions of the hysteric were for the most part



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artificial. And it would seem that these results justify my description of emotion given in an earlier part of this paper, that emotion is "a subjective feeling consisting of central excitement and visceral sensations, occasioned by situations which powerfully oppose or facilitate the aim of any instinctive impulse."

### *Summary.*

(1) The term 'emotion' is used in this paper as a subjective feeling consisting of central excitement and consciousness of visceral sensations.

(2) The James-Lange theory is untenable except in a very modified form.

(3) The psycho-galvanic reflex is in the same person at the same time and under the same conditions an indication of the intensity of crude emotions as subjectively experienced.

(4) There is considerable variation in the amount of the reflex in the same person at different times due to such causes as fatigue, alcohol, menstruation, etc.

(5) The psycho-galvanic reflex is not necessarily a criterion for comparing emotional reactions in different persons, unless we accept the James-Lange theory—taken by itself it only indicates the reactivity of the skin. But it seems to be a criterion of the amount of visceral sensations which are the concomitants of emotion and which reinforce what would otherwise be only a momentary excitement.

(6) The psycho-galvanic reflex is conditioned by the state of the cerebral cortex, but the relative parts played by the condition of the skin, the optic thalamus, and the reactivity of the autonomic nervous system have to be determined.

(7) In patients with definite cortical degeneration or maldevelopment the reflex is very small or non-existent, in cases where organic changes in the cortex are probable it is comparatively small, and in others in whom there is no evidence of cortical change it is much larger.

(8) The view of James and Janet that the emotions of the hysteric are largely artificial is probably correct.

## EMOTION AND EYE SYMPTOMS.

BY W. S. INMAN.

DURING the past fifty or sixty years it has been customary to regard errors of refraction as the cause of many symptoms of ill-health. Headache, tics, insomnia, inability to concentrate attention, photophobia, flushing and watering of the eyes, neuralgia, anorexia, constipation, anaemia, mental dullness, sleepiness and languor, squint, migraine, hysteria in many of its forms, are but a few of the troubles attributed directly or indirectly in modern English text-books to eye-strain. Some American ophthalmologists have been even more extravagant in their views, and claim to have cured scores of other ills by means of glasses. The mental and emotional state of the patient has not been considered, and the possibility of this state determining the eye symptoms instead of the eye condition causing the general manifestations appears to have eluded both oculist and physician. It is the object of this paper to show that the eye rarely produces other than ocular symptoms, unless the patient is emotionally unstable, and that he frequently is relieved, not by glasses, but by suggestion or else by some adjustment of the inner life usually unknown to the oculist.

Headache is the most common symptom for which patients seek relief from the ophthalmic surgeon. There are scores of thousands of people in this country alone who are wearing glasses, not for the purpose of seeing better, but solely to relieve headaches. In America, I believe, the practice is much more common. In France, on the contrary, it is rare. Are we to assume that the French suffer less from a given degree of eye-strain, and the Americans more? It must be remembered that the correction of errors of refraction is a modern invention. Astigmatism was hardly known, even by the medical profession, fifty years ago, and a hundred years ago probably no one wore glasses, except for old sight and pronounced degrees of hypermetropia and myopia. It is true that reading in those days, at any rate as we understand reading now, was rarely indulged in, but many occupations needed close attention to detail. Modern machinery, such as the sewing machine, has relieved the eyes of a great deal of strain. Either a large proportion of our forefathers suffered from chronic headache, or they were of a different breed from their

descendants three generations later. The literature of those days certainly describes the neurotic, usually a woman, with her vapours and humours. She probably suffered from headache, though I am not aware that it is specifically mentioned. Is the modern man or woman affected with headache, for which no obvious physical cause can be found save eye-strain, considered by the medical profession to be suffering from a neurosis? Are other symptoms present which are overlooked? An error of refraction of some sort can be found in the majority (probably 90 per cent. would not be an over-estimate) of the population. Why do some suffer, and not others? It is clear that other factors must be sought, and some years ago I began to study the type of individual who complained of the nervous symptoms of which the chief is headache. One of the earliest cases which comes to my mind is the following:

About twelve years ago a highly intelligent woman of thirty-eight consulted me for pain in the eyes of some months' duration, accompanied by difficulty in reading. A careful estimation of the refraction revealed only 1 D of hypermetropia. Such an error may be considered always as congenital. Thousands of people have this amount without being conscious of it in any way whatever. It seemed to me that there must be some unrecognised reason for her present susceptibility and past immunity, for the eyes had not troubled her before. The glasses were taken from her face, and she was invited to talk about herself. After a moment's hesitation she began the following pitiful story:

At the age of eighteen she had been seduced under promise of marriage. The marriage eventually took place. During the honeymoon the husband coolly explained to his wife, who was really fond of him, that originally he had had no intention of marrying her when he gave the promise, but that a later consideration of his honour had decided him to carry out his pledge. This was a great blow to her womanly pride, for she had thought the marriage one of affection. Two children were born, and had attained the ages of ten and twelve when the husband became partially impotent. She kept true to him until she found that he was carrying on an intrigue with another woman. Then she considered it no disloyalty to take a lover. Eventually the husband was forced to take notice of her conduct; to avoid a scandal for the children's sake he exacted a promise from her that she would not see her lover again. This she had faithfully kept until that date. Loneliness and dissatisfaction with life oppressed her, and she found it difficult to distract herself by reading and needlework. I ordered glasses for her, and gave her what I thought to be good advice and encouragement. She was much better generally for

several months, though unduly emotional. Then I lost sight of her for a time. When next we met, she was looking radiantly happy and well. She had resumed her intimacy with her lover, and had realised that eye-strain was a very unimportant factor in her physical distress.

Many such cases of emotional stress presented themselves. A common instance was the young mother. Either during pregnancy, or soon after confinement, she sought relief from definite or vague symptoms, which were attributed to eye-strain. An error of refraction was usually found, glasses were prescribed, and she was assured that she would be relieved by them. They were worn for a few months, and then frequently discarded: yet the refractive error remained. This needed explanation. Consider the mental state of the patient. She had been taken from the family of which she had been an important but careless factor, and plunged into a new life, of which she knew very little, and for which she had never been educated and prepared. She was expected to adapt herself to it by the light of Nature. Separated from the protection of her family, she had to conform to the standards of life of a comparatively strange man, to share his bed and board, often at a considerable distance from her own home, with few friends, and those recently acquired, with new social duties and domestic responsibilities, and with much spare time to dwell upon her new life, in the absence of her husband at his daily work. Little wonder at her facing her first confinement with alarm and apprehension. The Woman's movement and its revelations in widely spread literature told her of the mortality in childbirth. The confidences of her friends awakened her mind to the agonies of prolonged childbirth. As one expectant mother told me, "I know only too well the pain of having the bowels opened when constipated; how shall I bear the bringing forth of a fully formed child?" To such people, the first confinement is a veritable shock. It is ridiculous to think of every woman regarding childbirth as a normal everyday matter: as well expect her to look upon death with equanimity.

Then came the joys of motherhood. Attending upon these were the duties—sleepless nights, anxiety about the infant, whose every cry might end in a convulsion, the absence of the nurse upon whom she had depended for advice, the departure of the mother, who had come for her daughter's first confinement, and who represented care and spiritual comfort and gave a sense of importance to her function in life. And then the resumption of the rather lonely life—can it be marvelled at that she became once more self-centred? Under these circumstances, it is easier to develop neurosis than character. The making of the infant's clothes



not only led to more use of the eyes, but gave greater opportunity for day-dreaming. Naturally the symptoms which arose were attributed to the prolonged use of the eyes, and she sought relief in glasses. After some months, adaptation to the new life was obtained. She resumed her outside interests, games were again indulged in, she could go abroad with her husband, the child ceased to trouble her sleep, and throve as is the way of even first children, and the glasses were put on one side and forgotten. They, however, got the credit for the abatement of the symptoms. It must not be thought that I claim that headache is never due to eye-strain. Brow-ache, due to the over-action of the frontalis and orbicularis, is common where a prolonged effort has to be made to overcome a considerable error of refraction, such as a high degree of hypermetropia or astigmatism, the facial muscles being called into play to aid the purely ocular muscles. Pain is often absent even in such cases, as shown by a boy of twelve, with 9 diopters of hypermetropia, who has never suffered in his life, although he has reached the ordinary standard at school for his age. But an ache in other parts of the head, such as the top or back, or radiating pain along the temples, is to be regarded with grave suspicion by the ophthalmic surgeon, as belonging to a more general functional nervous disorder.

I think it will be generally conceded that the frequency and intensity of headache has no relation to the degree of strain.

Ophthalmology offers no explanation of the cure of severe headache in a boy of ten years of age who had a high degree (3 diopters) of hypermetropic astigmatism. He had worn the glasses with complete relief for three years. Then, before getting a new pair of spectacles, he was re-examined, and it was found that the optician had carried out the original prescription so carelessly that the axes of the cylinders were about 60° wrong, and the boy could see better without than with the glasses.

I have found again and again that headache, eye-ache, inability to focus or concentrate upon reading or sewing or fine work, have begun at some period of emotional stress. Strangely enough, the patient is never aware of this fact, and is always astonished when it is revealed. It occurs equally in children and adults. In the former it is very common about the age of ten. A consultation lasting but a few minutes does not give sufficient time for probing the matter very deeply, and a good deal of intuition is necessary to arrive at a solution of the difficulty. Fortunately the attendance of one of the parents gives much information. Especially helpful is a study of the father. The average father fails lamentably in his duties towards his children. His idea is usually that embodied in

the fifth commandment. He is to be honoured regardless of his deserts. The next generation is brought up as he was brought up. What was right for him must be right for his child. I regret to say that after examining many thousands of children, I have come to the conclusion that the mark of the father on the offspring is very frequently the mark of the beast. This opinion I hope to justify by various examples, especially in my remarks on squint.

The adult's difficulties which determine the development of nervous symptoms commonly show about the age of puberty, a period which is grievously mismanaged. Girls suffer more than boys. Their emotional growth is more rapid. Until recently nothing was done to help them, to give them a sympathetic explanation of the phenomena of sex. I have had many confidences from women, of their difficulties during this period. Masturbation, solitary or mutual, day-dreaming, morbid curiosity, actual sexual experiences with boys or men—very often close relatives, such as cousins or uncles or even brothers—these are stresses which leave a permanent mark upon the inner life and its outward expression. One girl of twenty-three confessed to me that she had had sexual relations with her three uncles, all brothers of her father, the first at the age of thirteen. She was in a very hysterical state, because her fiancé had his suspicions that something of the sort had happened, and he was attempting to make her his mistress instead of his wife. Another girl of eighteen attended the hospital complaining of disabilities for which there was no adequate ocular cause. On being asked if she were not in some sore trouble, she broke into an agony of weeping, and said that her father had outraged her twice; on the second occasion he was interrupted by the stepmother, who then attempted to stab her with a knife. What is the use of correcting one diopter of hypermetropia with a pair of glasses in such a case? Her symptoms had disappeared when she attended a week later, and did not recur for a year. But every case has not had such harrowing experiences. The matter may be much more subtle, as in the case of a devout Roman Catholic girl of twenty-three, whose refractive error was not sufficient to account for her pain, and who had suffered only since falling in love with a priest. She had confessed to her own parish priest, had been told it was a sin, admonished and made thoroughly miserable. I ventured to commend her capacity for a pure affection for a good man, and her symptoms disappeared.

A lady brought her daughter, aged thirteen, for advice. Three years previously glasses had been prescribed by an ophthalmic surgeon for headache, and had been worn constantly ever since. At the periodical

examination of the pupils at the school, the medical officer had told the patient that she might stop wearing the glasses, but her mother preferred to consult an oculist. I found that the lenses were only + 0.5 Sph. The girl said that they gave her great relief. It was clear that some other factor than eye-strain was present. She was an only child. The intimate friendship between mother and daughter was obvious. The mother at first could suggest no emotional cause for the symptoms, but soon remembered that just before the child was taken to the oculist there had been a discussion about sending her away to school. The girl had raised little objection apparently, but from considerations of health a day school was chosen.

I advised that the glasses should be discarded completely. This was done, and at the end of six months she reported that she had had no discomfort. A month ago, the mother consulted me for eye-strain. Her glasses were found to be correct. The symptoms had arisen last August, immediately after the death of her own mother. Notwithstanding the experience with her daughter, she had not recognised the association.

About two years ago my friend Dr Millais Culpin, for whose help and advice I make grateful acknowledgement, asked me to find out how many of my patients suffered from fear of the dark. He was anxious to know what proportion of the general population was affected, but the investigation was soon abandoned because it became clear that the patients of an ophthalmic surgeon could not be accepted as normal. They were of the neurotic type, and therefore more inclined to suffer from phobias. I cannot give definite numbers, but the fact was established to my own satisfaction that nearly every person who complained of the effect of glare or bright light, whether natural or artificial, had either definite fear of the dark, or could remember his struggles to get rid of the fear when a child. In this connection, may I explain that such a history is not easy to obtain, especially from men. It is man's clear duty to be afraid of nothing, and he will deceive everyone, including himself, to fulfil this duty. A year ago, a man of about forty consulted me, owing to intolerance of light, which he attributed to the glare of India. He had lived there for many years, and was a big game shooter in his spare time. I forget how long he had suffered from discomfort in the eyes, but he had wandered from oculist to oculist seeking relief. The correction of his error of refraction in various ways, and the use of dark glasses, amber-coloured glasses, and chlorophyll tinted glasses had failed to help him. Even that ultra-modern invention of Sir William Crookes, advertised as Crookes glass, and lately much affected by ophthalmic sur-

geons and opticians, proved ineffectual. At the end of the recital of his troubles, I drew a bow at a venture, and asked, "What about your fear of the dark?" The effect was electrical. He admitted that he was terrified in the dark, and said that even when shooting in the jungle, he would arrange his plans very carefully so that he might reach his tent by sunset. He would then retire for the night with a lighted lamp, and not venture forth until daybreak, but he took elaborate precautions to hide the cause of his conduct from his servants. All his life he had kept his phobia a close secret, even from his wife. It dated from early childhood, and he could not explain it. If he had had a genuine fear of the light, it is very unlikely that he would have chosen India for his life's work.

It may be added that he had also an intense fear of dogs, and could not bear one to come near him.

If such a man would take so much trouble to conceal what he considered to be unmanly, it is clear that much understanding and sympathy are necessary in order to arrive at the truth. So many similar histories, though of course less striking than the foregoing, have been obtained, that I am convinced that fear of the light as a manifestation of a concealed fear of the dark is a genuine instance of the ambi-valency of emotion.

In this connection another case comes to my mind. Two years ago I was called to see a child of three, who had been unable to face the light for some weeks. The mother feared some serious inflammation, and yet must have had some doubts, or she would have sought advice earlier, for they were wealthy folk, and the child was heir to a large estate. The child entered the room with every appearance of photophobia. Some time was necessary to win his confidence, but at length he allowed me to make an examination, and to my astonishment nothing abnormal could be found. He bore the strong light of a focused lamp without difficulty or discomfort. During the examination he repeatedly pushed his hand into his mother's bosom, which awakened my suspicions. He slept with his nurse. I asked to see her. She looked a healthy country girl, but enquiry revealed that she had had charge of the boy for only a week. The previous nurse, a woman of forty-five, had left a week before, and the mother under pressure gave an unsatisfactory account of her. She had behaved strangely. She was infatuated with the child, declaring that he was as sweet and holy as the Infant Jesus, and that people ought to approach him on their knees. On several occasions the mother had heard the child panting, and thinking he wished to relieve his bowels had taken him to the lavatory, but he had shown no desire to avail



himself of the opportunity. There was reason to believe that the mother was concealing other significant facts. The child's photophobia persisted for many months, and then gradually disappeared without treatment. I look forward with much interest to developments in adult life.

Another case which illustrates ocular symptoms associated with sexual difficulties beginning in childhood is the following. A lady, then thirty-five, was given + 2 Spheres for constant wear nine years ago. These made her comfortable. Four years ago the eyes again gave trouble. Owing to the war she could not consult me, and within a period of two years she sought the advice of six London oculists, and received six different prescriptions for glasses. The discomfort continued. Eventually I was able to examine her. The various prescriptions were compared, and small fractional differences in them were found. I invited her to talk about her emotional life. She graphically described a terrific struggle against masturbation since the age of nine, and from the age of twenty-seven homosexual relations with a woman older than herself, until she was over forty. Moral considerations had then caused her to abandon the life, and the eye trouble coincided with this period of renunciation. When I last saw her, she had returned to glasses which did not differ practically from those which had relieved her in the first instance.

In support of the view that the mental state of the patient determines the onset of symptoms from a practically unchanging error of refraction, is the periodicity of recurrence. Frequently it has been noticed that patients come for advice in the same month of the year, at intervals of several years. They are unaware that they have done so, and when their attention is drawn to the fact, they cannot explain it. The following case may be cited: A lady consulted me in March 1918 for headache and eye-strain of six months' duration. She had done so previously, in March 1915, and then gave the same history. Her health had suffered in other ways in the previous September. She knew no reason for this, but soon recollected with much emotion that she had been married twelve years previously in March, and in September had discovered that her husband was a chronic drunkard, and a ne'er-do-weel. Beyond the emotion shown, I have no reason for assuming that the association of her distress with those months had any bearing on the case; such an association has happened on so many occasions however that I am convinced that it was a factor.

Naturally these coincidences led to an examination of the type of individual affected by these stresses, and it soon became easy to distinguish between those patients whose eyes were a genuine source of dis-

comfort, and those to whom the pinprick of a small error caused excessive reaction. The latter were one and all of the kind commonly known as the highly strung. Sensitive, inwardly shy, though outwardly very self-possessed, obviously shrinking from meeting the unpleasant side of life, often giving clear signs of physical bravery and moral cowardice, yet with a strong sense of duty and conscience which impels them to make efforts to overcome their ethical shortcomings, they are continually in a state of unconscious conflict. A glance at the face is sufficient to reveal their stresses to an observant eye. An appearance of anxiety frequently is present, whilst the tight lips and turned down corners of the mouth show the struggle for self-control, and the disappointing results thereof.

In order to determine what proportion of the cases had other than ocular symptoms, I asked all patients who came to me for glasses if they suffered from insomnia, depression, cold extremities, and giddiness, and in order to get some idea how they spent their unconscious hours, to what extent they dreamt. One hundred consecutive cases gave the following results:

13 were males, 87 females. This sexual disproportion is very significant. Six were under twenty years of age, 19 were between twenty and thirty, and 75 were thirty years and over.

*Headache.* In 16 headache was not complained of. 84 were affected, five very severely; the pain was often associated with other symptoms of migraine.

*Insomnia.* Only eight were satisfied with their sleep. 69 slept badly. 23 slept heavily, but were not refreshed afterwards. Morning headache was common in the heavy sleepers.

*Depression.* 93 patients complained of this symptom, and seven of them described it as very severe. In most of the cases the depression was of such a character as to make the patient eloquent upon the matter.

*Cold extremities.* 61 suffered from cold hands, and 78 from cold feet. A history of chilblains was common. Hot hands occurred in five cases, and hot feet in three. One woman who complained of cold hands, was much troubled by hot feet. It frequently happened that on the coldest nights in winter she was compelled to push her burning feet outside the bed-clothes, before she could get to sleep. This unequal action of the vasomotor system needs further investigation.

*Giddiness* was present in 60 cases.

*Dreams.* 44 patients stated that they dreamt much, 35 only occasionally, and 21 said they never dreamt. It was noticed that the bad sleepers

usually had nightmare, whilst the dreams of the heavy sleepers were generally of the innocent variety.

Judging from certain cases which were more fully investigated, a similar frequency of other neurasthenic symptoms would have been found in the patients who attend the ophthalmic out-patient department in such large numbers. An error of refraction could be found in nearly every instance, and glasses were prescribed, but it was with a sense of impotence to deal with the whole condition adequately, since the diseased state was clearly not local, but general.

In addition to giddiness, there is sometimes a definite fear of falling, accompanied by a sense of unsteadiness of objects looked at. Thirteen years ago I was consulted by a woman who suffered from such a fear. She had a moderate degree of astigmatism, for which glasses were prescribed. A month ago I saw her again. For years she has been completely helpless and horribly deformed, owing to rheumatoid arthritis. In a talk with her husband, I learned that after bearing two children, and before the disease had started, she had unaccountably become sexually anaesthetic. The disease started in the second and third fingers of the right hand. Can it be that the Freudian explanation of the fear of falling in dreams applies equally to this phobia?

It has become a habit to ask every patient with headache, and other vague ocular symptoms, "When did you have a nervous breakdown?" It is astonishing how often a history can be obtained. Want of adaptation in varying degree to the stresses of life can be observed in every case, and a serious want in a very large number. In this connection I would like to relate the following: A woman of about thirty went into a nursing home for a rest cure. She formed a strong attachment to her night nurse, who would sit on her bed during the wakeful hours, conversing on various matters. Suddenly one night they both became much moved, and found themselves in each other's arms in an ecstasy of sexual emotion. She was much ashamed the next morning, but the friendship grew. When she left the home, the relationship was broken on moral grounds. She was better mentally, but her eyes began to give trouble, and she consulted me. I prescribed glasses. A month or two later, I wrote enquiring as to her progress. She replied that she had relapsed, and was again going into a nursing home for a rest cure. I asked her when she first came, if her doctor knew about her experiences. She said "No," and refused to allow me to tell him.

Many, if not most of my adult patients have suffered from "neuritis," whatever that may mean. Scores of them have had abdominal operations

for conditions such as floating kidney, and uterine troubles of an uncertain nature. Mucous colitis, disordered action of the heart, neuralgia, skin lesions, such as eczema and pigmentary disturbances, tics, chorea, wryneck, have succeeded each other at varying intervals. The alternation of manifestations of illness has not received the attention it deserves. A case illustrating it is the following. A young lady of twenty-six consulted me in February, owing to headache and aching of the eyes after reading for a short time. Examination showed that the refraction had not changed in the slightest degree since a visit five years previously. The symptoms had arisen in the previous December. In October she had complained of abdominal pain, and had been under observation in a nursing home for two months for suspected appendicitis, but the symptoms disappeared without a definite diagnosis having been made. Before this illness she had been suffering from neuritis in her arms, which in turn had followed some other ailment. She was certain that she had been perfectly well before the previous March. When asked if she had experienced any emotional stress at that time, she became much agitated, and declared that it was impossible to discuss or even think of it. It seemed to me possible that her various illnesses, for which no organic lesion had been found, served to express an unassimilated emotional experience. She has since married, and is now in good health.

#### *Glaucoma.*

The effect of emotion on glaucoma has been known for a long time, though the occurrence of the disease in later middle life has tended to obscure the frequency of the association. An interesting case is the following. A lady who had had an operation on one eye five years previously, suddenly developed acute pain in and around the second eye, whilst staying with her mother. Examination revealed no increase of tension, and a diagnosis of neuralgia was made. She was staying in the house of a medical man, who was interested in the Freudian theory. Whilst discussing dreams, she declared herself a disbeliever in their significance, and she was invited to put the matter to a practical test. She had had two innocent dreams. A superficial analysis rapidly brought both dreams to a consideration of the father, who was much loved, and who had been dead two years. The patient became emotional and suddenly asked that her eye should be examined, as it felt very uncomfortable. I saw her, found the pupil dilated and the tension raised, and operated upon her the following morning. Her mother, grandmother, and probably her great-grandfather had suffered from acute glaucoma.



In another case a man of fifty-eight developed acute glaucoma whilst returning from the funeral of his mother, who was over eighty years of age. He was successfully operated upon, but some weeks later reported that he was in a very nervous state, for which he could not account.

### *Unequal Pupils.*

The action of emotion on the pupil of the eye is common knowledge, but the nature of the emotion is not always recognised. The following three unusual cases taken together point to a new field of research.

Some months ago a man of thirty-five was sent to me because unequal pupils were giving rise in the mind of his doctor to fears that serious disease of the central nervous system was beginning. He was a man of much vitality and energy, who had been wounded four times in the great war, and had escaped all nervous symptoms, except a stammer of a fortnight's duration after being shot through the stomach. In August 1920 his father died from senile dementia associated with arterio-sclerosis, and much of the nursing and control of the invalid devolved upon the son. The latter was an only child, greatly attached to the mother, but never on good terms with his father, whom he described as stern, strict and unapproachable. Soon after the funeral the mother noticed that his pupils were unequal, and commented upon the fact. In this instance the emotion was not that of unalloyed grief at the loss of a loved object.

The second case was a girl of twenty-three, whose unequal pupils were noticed by the mother immediately after the death of her father, a month before she attended the hospital.

The third was a woman of thirty-eight. The difference in the size of the pupils was seen by the sister on the first anniversary of the father's death, whilst leaving the shop at which they were buying a wreath to be placed on the father's grave, to which they were then going. The emotion shown by each of these two latter patients, during the recital of these circumstances, testified to the sincerity of the grief for the loss of the respective fathers. There were no other signs of derangement of the sympathetic nervous system. All three patients were in perfectly good health, as far as could be discovered.

Two cases in which muscle imbalance is associated with unequal pupils are mentioned later.

*Watering of the Eyes.*

This is usually due to obstruction of the tear passage. A case which suggests a more obscure cause is that of a lady of forty-five who came to me with a watery left eye. Examination showed that the tear passage was patent. The symptom dated from last August. She had suffered similarly on two previous occasions, the first being when she was twenty-two years of age. At that time she had had a serious difference with her mother, to whom she was much attached, concerning a certain friendship of which the mother disapproved. The breach in the relationship with the mother was the more affecting since it was the only time in her life that the patient had disagreed with her. The lacrimal passages were operated upon by her own doctor, and after some weeks of painful treatment the epiphora disappeared. Two years ago it recurred. The patient had been living with her mother during her husband's absence at the war. She had been married seventeen years. When the war was over, she left her mother to join her husband and the eye was watery for some time, but recovered without treatment. The third attack occurred last August, when the mother had a stroke, which endangered her life. Thus the symptom was associated on each occasion with a threatened separation from the mother, but the patient was quite unaware of the fact. It is perhaps unnecessary to add that the father had been an inconsiderable factor in her emotional life.

It will be noticed that in this instance no structural defect was found, but another case suggests a relationship between the sexual apparatus and disease of the lacrimal passages. A woman of thirty-five came under my care in 1914 for chronic suppuration of the right lacrimal sac. In 1915 the sac was excised. Six months ago, she again attended with an acute abscess of the left lacrimal sac, which had burst. Since then, she has had acute inflammation of the same sac on three other occasions. All the four attacks have occurred at menstrual periods. The second and third subsided with fomentations, but the last ended in the formation of a large and very painful abscess, which needed operation.

The nature of the infection has not yet been determined. It is worthy of note that at her periods she suffers much from headache, insomnia, depression, cold feet and giddiness, and has had a tendency to nasal catarrh at those times.

*Squint.*

About two years ago I began investigating the cause of concomitant squint. An increasing interest in the psychology of the child's first five years of life made me suspect that the deformity might be of the nature of a hysteria. It was impossible to get direct evidence of the cause. The onset of the defect at the usual age of two or three raised almost insuperable difficulties. The child could give no account of its troubles to a strange doctor, even if it were conscious of them, and the parents, for a reason which will become evident later, could give no help.

The peculiar onset of squint first gave an inkling that there might be some emotional stress at work. The deviation was not constant, but varied with the general well-being of the child. Its very origin could often be traced to a fright, whilst its appearance during or soon after an illness, such as measles or whooping cough, was suggestive. The parents often gave a history of its being present only during temper or other state of excitement, or of its being much increased in amount under these circumstances. Every oculist has seen a squint vary greatly during a short examination, and it may be presumed that the mind of the child is much exercised on such an occasion.

Again, the more frequent occurrence of squint in hospital as compared with private practice, leads to a consideration of the difference between the types of patient. It is largely a disease of the uneducated classes.

Thirdly, the frequently unsatisfactory result of treatment by glasses, fusion training or operation, the suppression of the vision of the squinting eye, the greater preponderance of convergent squints (it is much easier to converge than to diverge at will), the want of relationship between the degree of deviation and the amount of eye-strain present, and the tendency of the squint to disappear in adult life, regardless of treatment, are factors which have not yet been adequately explained.

Being unable to obtain evidence of mental stress from the child, I first studied its parents, and then its brothers and sisters, and after a time found that there was a definite relationship of squint to left-handedness and stammering. As far as I am aware, the only other observer who has noticed the association of left-handedness and squint is Dr W. H. Rivers, tuberculosis officer of the Barnsley District, who in an article in the *Lancet* of February 12th, 1921, drew attention to the fact.

He refers to the past work on the relationship of mancinism and stammering, but suggests no explanation of the phenomena he has

noticed. His inclusion of tubercular predisposition points the way to a fascinating field of research. The psychological significance of left-handedness and its congener, stammering, has been appreciated by this Society, and the paper given last year by Mr H. Gordon on "Left-handedness and Mental Deficiency," together with the remarks of the chairman, Dr Henry Head, was very useful in helping me to formulate an explanation of the origin of squint.

It is desirable to state what is meant by left-handedness and stammering. The former includes all those persons who show a marked preference for using the left hand for any act or occupation, usually performed by the great majority of people with the right hand, such preference having been acquired voluntarily in childhood without any instruction or compulsion by the parents or others in authority over the child. Stammering includes all degrees from a slight inco-ordination in speaking, or an occasional but definite repetition of a syllable or word, to a pronounced stutter.

150 consecutive family cases of squint were investigated. In 13 the patient was a non-squinter, giving a family history of the three conditions mentioned. The remaining 137, comprising 76 females and 61 males, analysed below came under observation on account of a deviation.

131 had an obvious squint, and 6 had heterophoria (latent squint), whilst 13 gave a family history of squint.

Of the patients with definite squint, 117 were convergent and 14 were divergent. In 42 the right eye deviated, and in 62 the left. 15 had alternating squint, and in 10 the eye which deviated was not noted. 25 had squinting near relations.

In the 137 squinters and heterophorics, the father squinted in 5 cases, and the mother in 6, and 16 brothers and sisters were similarly affected.

Of the same 137, 86 gave a history of left-handedness in themselves or near relatives, comprising 122 individuals. 33 were themselves affected, and also 14 fathers, 8 mothers and 37 brothers and sisters.

Similarly 45 gave a history of stammering in themselves or near relations, comprising 75 individuals, and including the patient in 19 cases, 7 fathers, 2 mothers, and 38 brothers and sisters. There was also a family of six children, all of whom lisped.

In four cases the patient showed all three conditions; they were left-handed, they stammered and they squinted.

22 of the 137 were of one-child families.

In 14 cases there was a history of inter-marriage of persons affected by one or more of these states.



When the right eye was deviating, five patients stammered and four were left-handed.

When the left eye squinted, nine patients stammered, and sixteen were left-handed.

In alternating squint, stammering occurred in three patients, and left-handedness in six.

In heterophoria, the proportion was two stammerers to six left-handers.

The reason for including the heterophorics with the actual squinters will be seen from the following analysis of the cases:

No. 1 was the third of a family of five, whose eldest brother was left-handed, whilst the second child squinted.

No. 2 was slightly left-handed, *e.g.* she dealt cards with the left, and she was the daughter of an ambidextrous father.

No. 3 was left-handed.

No. 4 had a right eye which was amblyopic, and the father and one brother stammered. The patient was the eldest of three, and his brother and sister had normal eyes. He was noticeable for having an affection of the sympathetic nervous system; the pupils were unequal, the right brow was more moist than the left, and the right upper lid drooped, more especially when he was unwell. He left the Navy because he could not bear authority over him. He had never been on good terms with his father.

No. 5 also had an affection of the sympathetic nervous system; the right pupil was less than the left, and she blushed and perspired more on the right side of the face. The conditions were more marked when she was upset emotionally, particularly at her menstrual periods.

No. 6 had one brother who squinted, and another brother who was left-handed.

The numbers given may be regarded as minimal, as, subsequently to their compilation, I have interviewed personally the members of some of the families, and found definite though slight lesions not noticed by their relatives.

I think that it will be generally agreed that these figures are very suggestive, judging by everyday experiences with these phenomena, which can be observed by all. There has not been time and opportunity to get sufficient control figures from non-squinters, but the following results from a secondary school may have some significance. 33 boys and 32 girls of ages varying from fifteen to seventeen were interviewed.

*Squint.* There was no family history amongst the boys, and only one instance amongst the girls (mother's sister's child).

*Stammering.* One boy had a slight stammer when excited, and no other member of the 33 families was affected. The girls were more prone to this defect, since three stammered a little when excited, whilst six brothers and sisters were also affected to about the same extent. A history of its presence could be obtained in four other relatives, but in no case was the father or mother affected.

*Left-handedness.* Five boys and two girls were left-handed; also three fathers and two mothers, fifteen brothers and sisters, and ten other relatives.

The boys and girls in the secondary school were chosen from the elementary schools, *i.e.* the same class as the squinters, by competitive examination, one in five boy candidates and one in three girl candidates being accepted. It would seem as if the stammerers and squinters were left behind in the educational race.

It has appeared to me that the essential emotional difference between left-handedness and stammering is that the former comes from a desire to be different, whilst the latter results from fear. The impression given by squint is that it also is due, in many instances at any rate, to fear. That it is connected with the father very frequently, apparently with an inter-mixture of jealousy, has been impressed upon me many times by the simple ingenious stories of the mothers of the children, who have reported that the child was happy and healthy until the father came back from the war on leave, when its whole disposition seemed to change.

Dr Culpin tells me that when treating "shell-shock" he has frequently found that the men complained of a distressing intolerance of their children notwithstanding a longing to make the home happy. The children's egotistic desire to have their relationship with the mother undisturbed is thus intensified by the apparently antagonistic attitude of the father.

At first sight it would appear that the explanation of left-handedness by the theory of contrariness fails to account for the adoption of the habit by the child of a left-handed parent. Dr Culpin reminds me however of the possibility that the child recognises the fact that the habit represents the solution of a painful conflict in the parent's life, in which case the child's insistence upon copying the parent would be a sure way of showing its own desire for independence. Certainly all the left-handed parents with whom I have come into contact have disapproved of their children's not adopting right-handedness.

During the investigation of these cases, a relationship of acquired nystagmus and head-shaking to left-handedness, stammering and squint

has been found, but has not yet been followed up. Two cases of nystagmus were seen, one of which was an only child, the daughter of a squinting father, whilst the other was one of a family of six, the eldest of whom stammered.

A lady of fifty-two had suffered for thirteen years from head-rolling and nodding, which began three months after the birth of a child. The confinement was followed by an attack of influenza. The movements were made worse by the shock of an accident five years ago. The patient has a divergent squint and her mother had head shaking. The child to which she gave birth is left-handed, but another girl five years older is normal. The patient's husband's father stammered when a boy, and the father's brother's son has an extremely bad stutter.

Turning to the psychological aspect, an outstanding feature of these cases has been the very frequent history of parental strictness of an oppressive nature. Where this has been absent, one or other of the parents has been unusually reserved and unapproachable. It has rarely happened that the patient has given a satisfactory account of the relationship with both father and mother. Most of the children were brought to me by their mothers, and the difficulty of obtaining trustworthy information on such a delicate matter is obvious. Although I have satisfied myself that the fault lies in the upbringing of the child, I am not prepared at present to quote the statistics which I am collecting.

As a rule, the attitude of the father appears to have been the determining factor, but in a certain number of cases, the mother was the stern disciplinarian. Certainly an unhappy or unequal marriage appears to favour the production of squint in the offspring. This deserves the attention of the psychologist and the eugenicist. In several instances the influence of the parent was widespread, as the following case illustrates.

A woman of forty-one complained of several nervous ocular symptoms, of which the most striking was a blinking habit. She had had a squint which developed a year ago, during convalescence from an illness, and which disappeared spontaneously. She had fifteen brothers and sisters, all of whom stammered, whilst three of them were left-handed. The father had treated them all very severely, and she declared that she still bore marks of his brutality. She married a man who was a sexual pervert. He treated her cruelly, and she rejoiced when he died of typhoid fever. A healthy normal child was born of this marriage. Three years later, she married a man twenty years older than herself, who stammered. Two more children were born; one stammered, and the other was left-handed.

Another case closely associated with parental severity is that of a little girl of five, who was brought to me by her sister, aged ten. The younger child, who had a convergent squint, was cowed and shrinking, the older was more courageous and self-possessed, and able to give a vivid account of the situation at home. The father, a bully, showed his irritation at his child's squint by beating her, which made the squint worse. I took the child upon my knee, petted and comforted her, won her confidence, and in a few minutes the squint of about  $25^{\circ}$  had disappeared. Nor could it be induced again before we parted, although I conjured up a picture of the unhappy home to which she had to return.

Even more striking than the parental attitude has been the history of grandfatherly influence. The father's father very frequently has been reserved, narrow, strict and puritanical towards his children. Whenever the patient has declared that the father was kind and easy-going, it has been shown that the grandfather was overbearing and unreasonably masterful towards his son, and the latter's kindness is a reaction, a slackness in contrast to his harsh upbringing, rather than the expression of a frank open nature. The father is kind, but reserved, and it seems as if the child reacts to the undesirable environment which it recognises with unerring instinct.

I have already mentioned the tendency of these domestic rebels, if rebels they be, to seek one another in marriage. A striking case which shows this, and also the influence of the grandfather, is that of a girl who came under my notice at the age of seven, with a left convergent squint. She was hypermetropic and astigmatic, and was given glasses, which failed to cure the deviation, and an operation was performed when she was sixteen. By this time she had become myopic. The eye was practically straight after the operation. A fortnight ago she came complaining of discomfort in the left eye, which had "felt bad" for four or five months. During this time, she had been nursing her mother almost day and night. The mother died of aneurism in February last, and the girl, being lonely, married within two months.

She herself is left-handed. She stammers a little when excited, and has twitching of the left eye-lid. Her father was a "thoroughly bad character," and eventually deserted the mother. He was left-handed, and so was his father. Her husband is left-handed. His father is bigoted, and (I believe) left-handed, and they are constantly at loggerheads. When I asked for information on this point, the husband replied with a chuckle of delight, "I had a bad time with my father, but my old grandfather made things square with him, which is comforting to think about."



An interesting point is that the girl confided to me that she was not satisfied with her life. She found the restrictions of marriage irksome, being anxious to take up a career as a singer. The husband and his father have strong prejudices against the stage, which she considers unreasonable. Thus is the parental tradition, from which both husband and wife have suffered, carried on unconsciously. The prospect for their offspring is not pleasant to contemplate.

It will be noticed that the recent discomfort was referred to the left eye, with which she originally squinted; this eye still tends to converge and is not used. In this instance the squinting eye has good vision, but I have seen the same phenomenon when pronounced amblyopia has accompanied the deviation.

It is possible that in a garrison town, closely associated with the Army and Navy, the father influence runs to a severe discipline more frequently than in other localities. More than one mother has said that her husband could not help being a drill sergeant at home as well as in the barracks. A few months ago, a naval captain asked my advice about his little son, who had an occasional squint. He could not bring him for examination, as his family was living at a distance. I astonished him by asking which of his children stammered, and what was his reputation as a father. He replied that he had one daughter who stammered, but only when he spoke sharply to her, and that his wife had complained quite recently of his quarter-deck manner towards his children. I also asked whether the boy's squint began the day after he returned from a voyage. He answered, "No, it was the evening before."

Many times during the investigation of these cases I have come to the conclusion that they represented instances of the Oedipus complex. At other times it has seemed that a will to power lay at the bottom of the trouble. Under a hysteria might exist a definite motive, sometimes to gain a privilege which was otherwise inaccessible, sometimes to give offence and be tiresome and obstructive. Two possible instances of the latter may be those of two girls, one twenty-three, the other sixteen, who are not only left-handed, but when cutting their food, frequently and quite unconsciously use the back of the knife, having to be reminded of the fact, either by onlookers, or by the want of effect in the cutting. One of them has the capacity of producing left ptosis at will. She never got on well with her father, but was very fond of her mother and elder sister. I saw her fifteen years ago and ordered glasses for hypermetropia, which were lost three months later and never replaced. She now thinks it highly probable that they were lost intentionally. Her symptoms

therefore may have been another exhibition of her desire to get attention without honestly earning it.

An interesting case is that of a boy of eight, who was left-handed. He has an amblyopic left eye, though no history of squint can be obtained. For some mild misbehaviour he had been reproved by his father, and promptly replied by declaring that he was blind in his left eye; this worried his father greatly. On examination I found that the boy had left vision =  $6/24$ . The father, a keen cricketer, was rather proud of his son's left-handedness, and encouraged it, in order that he might be a left-handed bowler. The boy has now become right-handed.

It has seemed to me that each child is born with an imperative need of two kinds of affection, the one masculine, and the other feminine. Deprivation of one or the other leaves the child lop-sided in development, and a moral kink may be the result. The child of a really happy, well-balanced marriage, where, it may be presumed, the parents themselves are free from infantile fixations, appears to avoid the before-mentioned neurotic manifestations. It is fairly easy to recognise their more unfortunate fellows. Why the eyes should reveal so much of the character is not clear. It may be because they are the channel of so much of the communication with the outside world. In some cases, doubtless, their significance as one of Freud's erotogenous zones must be acknowledged, but this matter must be investigated by the psycho-analyst rather than by the oculist.

## MARY ROSE.

A STUDY OF THE INFANTILE PERSONALITY<sup>1</sup>.

By CONSTANCE LONG.

It is no insignificant fact that two such plays as Barrie's *Mary Rose* and Maeterlinck's *Betrothal* should have appeared on the London stage at one and the same time. Both deal with aspects of the unconscious mind, a subject which has become of vital interest to us during the last few years. When vital movements of a general character appear we can always discover that there have been *forerunners*. To go back only a few years we find among notable ones Von Hartmann, Samuel Butler, Du Prel, F. W. H. Myers, and in the present day Janet, Bergson, Freud, Jung, and many others far ahead of the general movement, already presenting their scientific and philosophical observations, forming theories and concepts which help to explain and forward the new perceptions.

At such a time a parallel movement can always be found in the art of the day. Poets interpret the unconscious to us and by their expositions prepare the way for the forthcoming truths. *It is the unconscious mind itself that has become important to us of late*. Interest in the unconscious may be either sensational or scientific; it can be materialistic or spiritual, whether it is applied to dream interpretation, ancient religions and cults, or occult phenomena. In its profoundest meaning it is a longing for a fresh revelation to replace the old values that have fallen so markedly into disrepute or desuetude, and for a new attitude to life.

Equally significant with the marked interest in the unconscious mind are the resistances aroused against it. At least a part of the outcry against Freud's theories arises not only from resistance to sexuality and its formulations, but also to the dread factors in the unconscious mind. Nearly every person first approaches the unconscious with suspicion.

There are very excellent reasons for the fear of the unconscious. It is a good friend, but a very bad foe. Barrie, in the drama under discussion, has given us an inimitable picture of it, while portraying one of the very most fundamental problems in individual psychology, namely, the persistence of the infantile personality. It is the Oedipus myth in modern

<sup>1</sup> Read before the Medical Section of the *British Psychological Society*, March 23, 1921.

form, and deals with the intermingling of the fates of the parent and child. In this play it appears we have something greater than we can yet estimate; the dramatist has given a form to the modern problem of the estimation of the unconscious.

I suppose that the story of Mary Rose is well known, even if everyone has not seen the play; I make no apology for leaving many gaps in its recital, and will speak only of what is strictly relevant to my theme. I speak from memory of the performance, as the play is not yet available for the reader.

It opens with the visit of a young Australian soldier to the home of his childhood, from which he ran away when he was twelve years old. The house is empty and mouldy and in charge of a scared caretaker who has become half-crazed on account of the terrible things she has experienced in this now haunted place. The soldier, Harry, is determined if possible to penetrate the mystery of the house. He establishes relations of tolerance with the caretaker, and after a talk with her, sits in the empty drawing room by a fire which he lights to dispel the clammy atmosphere, while she goes away to fetch him a cup of tea. She is away for ten minutes, as we are specifically told, and during that time the events which lead to the desolation of the house pass before him.

It transpires that the soldier, a man of twenty-seven, is Mary Rose's son. She is the heroine of the soul tragedy of which he is witness, and with which he fills up the gap in his knowledge of the events that have taken place in the house during his fifteen years' absence.

Mary Rose is a singularly lovable girl, whose tendency to absent-mindedness and momentary alterations of personality is hinted at from time to time in the play, as when for instance she becomes suddenly hallucinated in the midst of her talk with her lover, by the figure of the "little old woman" whom she sees for a second and describes as "a queer one."

At twelve years of age Mary Rose was with her parents on a visit to the Hebrides. While her father fished she sketched or played upon a little island called by the inhabitants "The Island that likes to be visited." The natives regarded the island as a magic one; they said that it never ought to have been there; that it appeared in a night. Cameron the boatman, who tells its history, pointed out that no birds were ever seen upon it, and that the vegetation was entirely alien to that of the neighbourhood. The native folk never landed upon the island because it was told amongst them that people had been spirited away from the spot. The English visitors however took no notice of the local legends.



and visited it constantly. Mary Rose, particularly, loved it so much that it seemed to be akin to her very soul.

On one particular day Mr Moreland, the father, came as usual to fetch his little girl. Although before he left the mainland, some one hundred yards away, he had exchanged a signal with her, on his arrival at the island she was nowhere to be found, nor was she seen again till thirty days had elapsed. We are allowed to know in the play that she had disappeared in response to the call of enchanting music, music "only heard by those for whom it is intended," to whom it speaks with an irresistible appeal. Thus she disappears for the first time into the unconscious, that is, into the region of dreams and phantasies.

It was only as the distressed parents were about to leave the place after a month's fruitless search and speculation, that the child was once more seen upon the island. The father rowed from the mainland to fetch her, and immediately discovered that she had no idea of the lapse of time, or that anything unusual had happened. The parents were if possible more mystified by her re-appearance than her disappearance, and at a loss for an explanation themselves they resolved to tell her nothing of the affair. They decided however that if ever a lover appeared and wanted to marry their Mary Rose, he must be told.

When first we see her on the stage this incident is already several years old. A lover has already appeared. He is a young naval officer, Simon Blake by name, and we learn from the parents' conversation with him all the circumstances known of this curious episode in Mary Rose's life. The parents impress upon their future son-in-law that the story must never be revealed to her. The only difference they can detect between their child and other girls is that she is young for her age and disinclined to grow up. They say that sometimes quite casually she would become absent-minded, and speak to someone who was not there, but before they could question her, the door of the alien world into which she momentarily looked was closed again. We should say in analytical psychology of such an episode, that the open door led into the collective unconscious.

The only one of Mary Rose's phantasies of which we get word is that of the little old woman already referred to. This "queer one" must have been the witch or gipsy, a grandmother or sorceress with whom we are familiar in myth and folklore. She is the possessor of magical powers and has the secret knowledge. This archaic image personifies the lure of the unconscious on its dread side, the beckoning of the Mother-Deep, an idea which is in complete harmony with subsequent events of the drama.

The next scene in the play shows Mary Rose a few years after her marriage. She is now the mother of a little boy of nearly three years. By means of the fanciful talk, half playful, and half plaintive, which passes between the young couple, we find that they believe themselves to be happy and united. We learn that they have never yet had a house of their own and, on account of Simon's long absences with his ship, they still make their home with her parents.

Mary Rose has persuaded her slightly reluctant husband to spend a holiday in the Hebrides, and now having left baby Harry on the mainland, they have actually just arrived and are picnicking on the fateful island. Mary Rose's satisfaction at finding it again is very great; and the husband, who has evidently come to regard the story of her disappearance as a dream on the part of the father, is only very faintly conscious of any anxiety, and is not even stirred to special watchfulness. The only anxious member of the party is the Highlander, Cameron, boatman in summer and divinity student in winter. He tells weird tales of the island, among them the actual story of Mary Rose's disappearance, although with certain inaccuracies of date. In spite of the fact that Simon is obviously made uncomfortable by the tale, his impression of fear soon passes, or is submerged in his extreme anxiety to keep the slightest foreboding out of the mind of his child-wife. They behave and talk like two happy children, and play their way into the real tragedy. For at a moment when her companions are not attending to her, Mary Rose hears the magic music, and following its compelling sweetness is caught away—this time for twenty-five years.

The most poignant moment in the play however is when at the end of a quarter of a century, having been found once more upon the island, Cameron, the boatman of yore, now a minister of the place, brings her back to her parental home.

She is no more changed outwardly than if she had risen up after a single night's sleep, but we find that her mind has become disorientated. She cannot grasp the idea of the lapse of time, nor understand the appearance of age that has come over her parents and husband. Her one anxiety is about her baby. It is of him she rather incoherently and brokenly implores everyone to tell her. Those who love her have no words in which to convey to her that if he still lives he is now a grown man, and that they do not even know where he is. For her the intervening years are void of meaning; between herself and her family there is now a great gulf fixed. No one is able to tell her the truth, no bridge can be thrown across the unconscious years that divide them. She is an alien,

who wakes from her dream of twenty-five years, incapable of making any new adaptation, having left her libido in the past and in the realm of phantasy. The measure of mind that is left to her serves only to recall dim memories of her lost infant.

In the opening scene the caretaker had informed Harry that she was "dead," and when we see her in the last scene it is as a ghost haunting the old home, always searching, searching, for something that is hidden from her, and of which she has but the dimmest idea. She hardly knows that she is still looking for the child she lost sight of so many years ago. Her aspect is quite inimical to the living beings whom she encounters from time to time, if she thinks they are keeping from her the object of her search.

Of ghosts Barrie says in an earlier work<sup>1</sup>: "The only ghosts I believe who creep into this world are dead young mothers, returning to see how their children fare. What is saddest about ghosts is that they do not know their child. They expect him to be just as he was when they left him. . . . Poor passionate souls they may even do him an injury. I know a man who, after wandering far, returned to his early home to pass the evening of his days in it, and sometimes from his chair by the fire he saw the door open softly, and a woman's face appear. She always looked at him very vindictively and then vanished. Strange things happened in this house. Windows were opened in the night. The curtains of his bed were set fire to. A step on the stair was loosened. The covering of an old well in a corridor where he walked was cunningly removed. And when he fell ill the wrong potion was put in a glass by his bedside, and he died. How could the pretty young mother know that this grizzled interloper was the child of whom she was in search?"

If we take these words of Barrie's literally, which I think is not justifiable, we might suppose that in his view the young mother who dies takes her libido for the child with her, and with it is able to project herself into the world she has left. Analytical psychology on the other hand would see in this symbolically true picture a personification of the longing for the idealised mother that persists in the adult man, and which indeed survives in every living being to a greater or lesser degree. Under certain conditions connected with repression, this mother image may become a complex, split off from consciousness, having a life of its own which makes it capable of re-appearing as an automatism. Concentration of passionate interest, albeit unconsciously, on the mother imago renders a man liable to many so-called accidents; namely those events in life

<sup>1</sup> *The Little White Bird*.

to which his pre-occupation with phantasy, and his indifference to the reality principle expose him. In this view the ghost is a projection of the unconscious incestuous wish, and is a creation of the man's own psychology.

We find a similar motif in Ibsen, in whose idea a ghost is the haunting persistence of the unanswered question and the unsolved problem.

In Barrie's work a universal problem is dramatised, and one which is of supreme importance in the development of each individual. Mary Rose portrays very pertinently the meaning of psychological incest, that is the unconscious adaptation to the parents, with its resulting bondage to the family, and the stabilisation of the infantile personality. The infantile personality is the product of the unconscious wish to remain a child, and the pursuit of the pleasure principle in lieu of the reality principle. For many people this problem always remains in the unconscious. Mary Rose's parents were themselves victims of it but never realised it. The fruits of this regressive tendency to the mother are seen in a narrowing of the personality, and an irresponsible attitude to life. Unsuitability of behaviour shows itself in foolish tricks, petulance and impatience, intolerance and rigidity, self-love, preference for old ways and scenes; old thoughts, old feelings express themselves everywhere. There are, for example, physicians who cling to obsolete modes of treatment, professors in bondage to effete values, priests who teach outworn creeds, scientists who are bound by old hypotheses, business men who use antiquated methods, teachers who resist innovations, and lovers who remain with old dreams.

Nothing is bad *because* it is old, but all old things are bad which have no value for the growing life of the individual. In all its aspects growing life entails that the inner movement shall keep pace with the outer requirements. If this is not accomplished, failure in adaptation occurs, which may manifest itself in neurosis, dissociation of the personality, or complete alienation of the mind. Such manifestations differ in degree rather than kind.

French and American psychologists and others have made us familiar with the subject of multiple personality existing in one and the same individuality, and we constantly see the effects of somnambulisms and changes of character. The shock of the war has been the occasion several times of the letting loose of a character unbelievable to former friends and acquaintances. But we all know what it is in different circumstances to "feel like another person." We see children who are solemn owls at school behaving like little imps at home. We know of voluble professors



who are dumb in society, and of strong men who become powerless in the presence of a woman. We present many faces to the world corresponding to many attitudes of the soul. These changes are so much a matter of everyday life that we regard them as normal. We are all agreed upon the tendency of the mind to dissociation; and we cannot fail to observe that the severance will always occur at weak places of junction, and will follow lines already laid down for it in the psyche.

If we view this phenomenon from the energetic standpoint of analytical psychology, we say that under the stress which the obstacle in life places upon the libido, it must either make a movement forwards and find a solution of adaptation to life, or it will inevitably regress to old channels and light up a former mode of adaptation no longer suitable.

Child and mother are the opposite ends of a continuum which can act ambivalently; that is, the mother can stand for the child or herself, and the child can stand for the mother or itself. The accent of value can be displaced in either direction and yet relate to the same problem. Ambivalency, though normally present, is particularly active in neurosis. In the normal it promotes adaptation by providing a compensatory or balancing quality to mental activity; but in neurosis one is subordinated to a perpetual alternation of values. The neurotic is torn asunder by, or identified with, the pairs of opposites; the mechanism of ambivalency is made use of perpetually by the unconscious.

The child feels the mother to be her goal, and indeed motherhood is a goal for every girl, just as fatherhood is a goal for every boy. Hence honour to the father and the mother always appears a duty and a virtue, which affords unconscious satisfaction to the self. But those who never break free from father and mother never can accomplish the goal of the father or mother in themselves. This is not a new point of view, perhaps it was not even new two thousand years ago, when it was said: "I am come to set a man at variance against his father and the daughter against her mother."

We must then approach the problem under discussion from two sides, namely from that of the parent and that of the child. It is the privilege and duty of parents to assist in the mental liberation and growth of the child, but in so doing they cut off the branch upon which they sit. But the parents of Mary Rose positively betray their child to death, in their refusal to give her her own problem to deal with. Thus they refuse on their part to liberate the infantile personality.

The child is only too ready as a rule to acquiesce in this, for she does not really want to grow up in the inner sense of the word, for that would

mean taking up the problems of maturity and independent life, and following the dread path of individuation.

Moreover in retarding the child's development the parents not only rob the child of her birthright but rob themselves also of their appropriate task, namely that of *growing* old, which is quite a different proposition from that of *getting* old. The growing old is something they owe to themselves and to the young generation.

Mary Rose's first breakdown occurred when she was twelve years old. With unfailing intuition Barrie pitches the psychic conflict at its right moment in the pre-puberty stage. The phantasies relating to puberty pre-date the actual onset of the menstrual function.

With equal precision Maeterlinck pitches Tytyl's adolescent problem at sixteen, the age at which the Fairy Berylune introduces him to speculations and adventures concerned with the choice of his bride, adventures which he follows in the company of Light in the now "real" world of the unconscious. In Maeterlinck's drama *The Betrothal* the phantasies Tytyl follows or enacts have a prospective meaning and lead to expansion and life. In *Mary Rose* the phantasies are retrospectively or regressively followed, and lead to contraction of the personality and death. In the one as development and individuation proceed, Destiny diminishes in size and power. In the other the tragic heroine grows more and more childish and unreal, the "chancy thing" as Cameron calls it befalls her and she is swallowed up by the "Terrible Mother" of the unconscious.

Mary Rose's absence is only comparable to a prolonged lapse into a secondary state of consciousness, or into psychosis or mental alienation lasting for thirty days or twenty-five years. Her return to the world is not unlike a return to ordinary life after a prolonged absence in an asylum.

The author of the play is not bound by the limits of actuality. He may take a poet's licence and dispense with any bodily sign of Mary Rose for as long as his art requires. But when we deal with a concrete case we have to keep the psychic truant in our midst, and can only dispose of her in such a way as I have indicated. The drama can only truly portray the soul side of the problem. It is a drama of the world within one individual soul. It depicts something that is psychically true just as a dream depicts a problem, and I have given it an interpretation on the subjective plane, which Jung has taught us to value so highly for the prospective meaning of unconscious products.

The event which Barrie dramatises is one which happens in four dimensions as it were, and he alone of all playwrights could have given us just such a piece of art as this, and represented it so completely in

three. From the standpoint of psychology it is all within the bounds of possibility.

Maeterlinck's device for portraying the unconscious is much more self-evident. Tytyl turns the magic sapphire which he wears in his cap; the magic cap is a prevalent mythological motif. Mary Rose has no control over her fate; she is a victim, a hapless Iphigenia sacrificed by the father, with no friendly Artemis to place a substitute upon the altar.

What has happened to her is that she has taken a flight from reality for the purpose of evasion. If this evasion remains unconscious the essential psychic adaptation of puberty is not made. The external development is compensated by day-dreaming and phantasy, and the feelings remain on an infantile basis, which forbids real participation in the common human experience. -

Mary Rose is the girl who will never grow up of her own free will and she passes ever as a lovable child amongst us. It is true she married and bore a son, but she remained in the paternal home all the time. Her very first request to her lover was that she might if she married be allowed to go out and play sometimes. His ready acquiescence in her attitude is early seen; you remember when after their engagement has been sanctioned Simon says to her: "My child, you are in my care now, I order you to put on a jacket"; she turns to him delightedly with the reply, "Lovely tyrant, you do say the sweetest things."

The second attack of trance-absence overtook her at another epoch when an important new adaptation was required from her. Her baby was nearly three years old. How much longer could this girl have carried on her life of play? How could she who was still identified with nature (*vide*, her play upon the island), and indiscriminately with the rôle of mother or child, develop further to meet the demands and growing needs of her boy, or cease herself to be a child? She was too sensitive to escape the effects of the unconscious conflict unharmed. She could no longer play at maternity as a child plays with a doll, hence when life laid upon her the burden of becoming mature, and bade her become an equal companion instead of a plaything of her husband, the second summons came from the unconscious, and she succumbed to it. Her passion for the child-rôle is revealed in that moment when she says to her husband "the happiest time of all will be when Harry is a man and takes me upon his knee instead of my taking him on mine." She reiterates these words in the final scene, when as a ghost she accomplishes her wish.

Here we must contrast Mary Rose's problem with that of her own

mother. Mrs Moreland played the mother-rôle all her life, not only with her daughter where it was of course appropriate up to a point, but also with her husband, her husband's friend, and her son-in-law, whereby she unconsciously fastened the fatal child-rôle on all those about her. We cannot be surprised that the Morelands were nonplussed by the extraordinary fate that overtook their child. Unable to understand it themselves, they withheld all the circumstances from her. Thus for her it always remained an unknown danger, and she was unable to safeguard herself against the later catastrophe.

They hoped for the best, and in the belief that they were consulting the best interests of the child, took the path of least resistance, and saved her, and incidentally themselves, from the pain and difficulty of an explanation. Although they had often witnessed her tendency to sudden short lapses into an unusual state of consciousness, and though they recognised the childishness of her character, they were never able to bring themselves to tell her of her early strange adventure; all they could do for her was to "love her more than other daughters are loved." However they decided that if a suitable suitor appeared *he* must be informed. They would have thought it dishonourable to keep him in the dark about his wife, whereas they did not recognise that their silence to the girl herself was equally culpable. Unconsciously they must have felt that being one of such an intimate and happy family their interests were identical. For them she simply shared a family soul so to speak, and had no needs or individual rights of her own.

The parents in this particular case could take no other course, their line of action was determined for them on account of their bondage in psychological incest. *They were in love with the child.* This is the other end of the incest problem. Their attitude came through lack of differentiation and discrimination. Individuation as a principle of life had played no part with them, they had never in their own persons overcome their original family complexes. Mrs Moreland is a personification of the imago of the ideal mother. Barrie constantly draws her portrait for us. She is a tender seductive woman, who by the sweet poison she instils paralyses and binds those under her immediate sway. She is a woman who loves to have nothing but children around her, over whom she reigns as queen. The three men in the play with whom Mrs Moreland comes in contact are all in a more or less childish relation to her. The woman who is always a mother to men, by a mixture of tenderness, flattery, and well-dispensed maternal discipline, keeps them in adoring submission. She is at one and the same time Helen's rival and her greatest abettor. Her typical



attitude is seen at that moment where an inner discontent arises in her husband's mind. He complains that he has failed to take life seriously, and has always been concerned with trifling things, and in a moment of self-realisation declares that a suitable epitaph for him would be: "In spite of some adversity he remained a larky old blade to the end." He determines he will remind himself of his irascibility by going without his pipe, and of his vanity by going without a new dress suit. In the twinkling of an eye the maternal arms of his wife are round him, he is to be soothed with a comforter, and clad in "glad rags." He must not even at this late hour come to know himself, though he is nearly seventy; the wife must play the rôle of the charming mother to the end.

Thus unconsciously has she created the domestic tragedy. No longer beautiful, because no longer suitable, her attitude enslaves, and keeps herself and all human beings around her infantile. The evil effect of her gentle tyranny is seen in Mary Rose, for neither she nor those whom she has seduced, can meet the actual needs of the dream-ravished child.

The father's problem in this case includes the repression of his thinking function. He refuses to think about life. He rejects the male task. His attitude is summed up in his words to Cameron: "Please don't talk of it; I have been occupied all my life with such little things. Do you think she ought to have come back?" For the infantile character nothing that disturbs serene existence "*ought*" to happen. There ought to be no irrational occurrences, no sex problems, no revolutions and no death, and most of all no resurrections. For such, all ought to happen according to the wish; an end that can only be fictitiously accomplished through phantasy.

A last word must be said, and that relates to the son. His activities throughout seem to compensate the mother's. We note that he ran away at twelve, the age at which his mother had taken her first flight into the unconscious. Harry was reared by his grandparents. Of his father he would naturally see but little on account of his long absences at sea. Of their relations nothing is told us save that Harry as a child thought him very severe. We have to surmise what the spirit was that arose in the lad which pushed him away from the stifling love that had been the bane of his mother's life. He was bound to work out his mother's unfinished problem, for as Jung has pointed out the child is forced to make up in some way, either by neurosis or extra exertion, for what the parents fall short in.

Harry ran away to sea, perhaps in conscious imitation of the father, thus following the reality principle; but unconsciously he was seeking

the mother. Mythologically the sea stands for the maternal waters and the mother-deep of the unconscious. From the mother the hero is re-born out of introversion, and in following the "categorical imperative" and the urge to individuation, expresses his desire to be and do something, and assume a form of his own; hence a new attitude to life arises.

Mary Rose fled from reality, Harry's flight took him into the world of life and men. Mary Rose became ethereal, disorientated and dissipated into the collective unconscious. Harry became vital, coarsened, and welded into life. The moment he returns to his English home he gets right into the heart of the problem. His first contact with his mother is with an angry ghost. For a moment he is in great danger from her, although he is only aware of the fact later. She stands behind him in the dark with his own knife in her hands. The knife here is a fine symbol of the weapon of the will, which should be in his own hands and not in those of the mother.

I must not omit to speak of the Freudian symbolism of this weapon. The knife I take it would be accorded a phallic significance. It would represent the concrete incest wish; a real sexual desire towards the mother. This concrete interpretation seems to me less related to life itself than the one I have given. This man does not want sexual relations with the mother, he wants to find himself, for which reason he must be re-born from the mother. The weapon in question is his tool, his means of overcoming his enemies. While it is in his mother's hands he is defenceless, his individuality is in danger of being killed: in his own hands the knife provides the wherewithal to accomplish his conflict. This symbolism of the weapon in the hand of the hero is of such universal and ever-recurring prominence in mythology as to warrant it as an archetypal or primordial image.

Presently he recovers the knife, and though clearly he is not devoid of fear and uncertainty he proceeds to handle the extraordinary situation with courage and discrimination.

When he first meets the caretaker his attitude of mind is careless, he is curious, but with no foresight of what awaits him. He quietly overcomes his natural levity in the presence of her evident suffering, and realises that a comely young woman, such as gossip reports her to have been, does not become old-looking, scared and distraught for a trifle. In spite of his nonsense about "My Cabbage," and "winning the war," he displayed a reverent spirit before irrational facts which he could not understand. He listens. He thinks. His contact with a ghost, and that ghost his mother's, though uncanny, must be understood if possible.

There is sympathy in him as well as reverence for a "poor ghostie" whom he wants to help but does not know how. He proceeds feelingly, and with intuition. In fact to the best of his ability he summons the four chief functions of the psyche, namely thinking, feeling, sensation and intuition, to his aid, and in so doing acquires an objective relation to the problem, and so destroys the spell of the unconscious. Thus he releases not only his mother (his subjectivity) but himself. By overcoming his infantile attitude the unconditioned power of the mother imago is rendered null and void, illustrating the psychological truth of the idea that "whose soever sins ye remit, they are remitted unto them; and whose soever sins ye retain, they are retained." Harry will no longer be found amongst those adult children who blame their parents for every evil chance that befalls them.

He teaches Mary Rose to call him "Harry," and in some mysterious way she seems to become aware that he is, or does replace, the baby she has lost. For the last time the magic music is heard, and she goes back—or on—into the limitless unconscious. She fades out into the night, once more gathered to those collective things from which she never really detached herself. Once more she disappears, and a star falls from Heaven to indicate that a ghost is laid, that a soul has passed away; and shall we not say that another soul, which is the equivalent of a new attitude, has established its claim upon life, and lives on in the person of the son.

Thus in the drama of *Mary Rose* the complete cycle of the problem of the infantile personality is put before us; nor, in my opinion, is the solution withheld.

## REVIEWS.

*Addresses on Psycho-Analysis.* By J. J. PUTNAM, M.D., Emeritus Professor of Neurology, Harvard University. Preface by SIGM. FREUD, M.D., LL.D. Published by The International Psycho-Analytical Press. London. Vienna. New York. pp. 470. One portrait plate.

The founders of *The International Psycho-Analytical Library* are to be congratulated very heartily on this their first volume. Professor Putnam's writings have been well known to all students of Psycho-Analysis for the past decade, and it is very fitting that the more important of his writings and addresses should be collected into one volume, after his death, as a permanent record of the faith that was in him in reference to the teachings and work of Freud. The main importance of this book lies, perhaps, not so much in the subject-matter of the papers themselves as in the revelation of the personality of the author which cannot fail to be carried away by every reader, be he trained psychologically or not—a revelation confirmed and strengthened by both the preface contributed by Professor Freud and the obituary notice by Dr Ernest Jones. I know of no better testimony to the value of the whole Psycho-Analytical movement than the writings and utterances of Dr Putnam, when they are judged with full appreciation of his life-history, professional standing and environment. For over thirty years Professor of Neurology at Harvard University, Dr Putnam's reputation as teacher, writer and clinician had been founded on his knowledge of nervous diseases viewed from the organic standpoint; and it is some evidence of the strength of his convictions that the last fifteen years of his life were devoted almost entirely to the study of Psycho-Analysis, and to the testing of its principles in his clinical work. Dr Putnam's addresses are characterised throughout by clear reasoning, sound critical judgment and sturdy idealism. Although a staunch believer in Freud's work, within the limitations to be referred to presently, his critical faculty is never in abeyance, and the test of clinical experience and therapeutic result is always very clearly before him. The paragraph on page 53 might well be borne in mind by many critics of Psycho-Analysis: "It should be realized by every fair-minded person that in judging of the work of this growing school of able men, a separate estimate should be made; first, of the method which they use, next, of the conclusions which they reach. The former, at least, is of immense value for the ascertaining of a sort of truth hitherto concealed. Let the method be conscientiously followed and the conclusions will need no special advocacy."

A fuller criticism of the work under review falls naturally under three main headings: (1) papers dealing mainly with the general principles underlying the Psycho-Analytic movement and the critical study of the Freudian position; (2) those dealing with clinical cases drawn from the personal experience of the writer; and (3) those devoted to the philosophic and metaphysical conceptions characteristic of the author's personal views as to the scope, the limitations and the possible future developments of Psycho-Analysis.

The papers coming under the first of these headings are undoubtedly the



most stimulating and the most interesting. It is not so much that there is, in the subject-matter, anything new to anyone at all conversant with psycho-analytic literature, but that in the presentation of his conclusions there is throughout a clearness of vision, a grasp of essentials, a logical sequence of thought that is stimulating and convincing. Dr Putnam has one end in view—to convince his audience and readers that Freud's work has given to the world a new method of investigation into the motivation of human thought and conduct, and to the medical profession a new insight into the meaning of mental and nervous diseases, the scientific value and truth of which can never be ignored or denied by any honest observer in the future. The criticism of the work of Adler is a good example of clear reasoning and judgment, and his final rejection of Adler's position and also his criticism of Jung give evidence that his acceptance of the pre-eminence of the Freudian view was not attained to without full inquiry into other schools of thought.

Loyalty to the genius of Freud is evident throughout, and two passages may perhaps be quoted in this connection as being characteristic of the author and worthy of wide publicity: "The lessons of loyalty are readily forgotten. It is very easy and enticing, after the first flush of enthusiasm for the work of a great leader has somewhat passed away, and lesser men begin to come forward with sharp criticisms and with generalizations that claim to be original but that shine really with reflected light, to transfer to these men the allegiance which is still, in reality, the leader's due" (pp. 337-338). And again: "If observers coming after Freud, and using either the same method or another of equal or greater value, find reasons to arrive at conclusions different from those which he has reached, they may doubtless prove to be benefactors of science or their race. But it is certain that their own conclusions will be of little value, and their method not one to be recommended, if in reaching the former or employing the latter they are led to set aside as worthless or as needless the facts and deductions which this clear-eyed observer had set down as true. New doctrines may go further than old ones, and may absorb them and give to them a different meaning. But unless the old doctrines were false in the sense of having been made by a man who was false to his own sense of accuracy and truth, they surely stand as data to be explained or dealt with with respect" (pp. 338-339).

Those papers in the series which deal with actual cases treated by the Psycho-Analytic method, interesting though they be, are probably the least valuable in the volume. All psycho-analytic cases are notoriously difficult to report fully, and naturally Dr Putnam's earlier ones demonstrate little more than the experience that even a short analysis of a suitable case will give evidence to both analyst and patient of the validity of Freud's main conclusions.

The "Sketch for a Study of New England Character" is certainly, in my opinion, the best of the clinical series. It is interesting to note that Dr Putnam makes little mention, except in Chap. xviii, of the all-important subject of transference, and I think there is evidence in some of his cases that the stage of positive transference was perhaps not sufficiently recognized by him. This is not surprising if we bear in mind the character traits that are so well brought out in the obituary notice by Dr Ernest Jones.

The philosophical and metaphysical sections are interesting mainly for the insight they give into the personality of the author, and it is noteworthy that Dr Ernest Jones states definitely that he knows of no other instance

in which philosophical views have not become placed in the service of some or other unconscious resistance. The following paragraph sums up, I think, the philosophic creed which is so vital to Dr Putnam in spite of his frank recognition that Psycho-Analysis has no direct concern with ethical standards or moral values. "But it should be clearly known that the patient's mind contains also a variety of other data which he is not likely to bring to light, yet which it is vitally important for him to recognize, if this can be brought about without detriment to his progress, as significant sources of motive. Such matters are certain inherent "moral obligations," which everyone who will listen to his own conscience will find that he feels, first, as a member of the "community," in a widening sense; next as a virtual member of an ideal community, or—if one will—of the universe. I will waive the question whether the psycho-analyst ought to bring these matters definitely to the patient's notice (though I will say that I believe one reason this obligation is not felt is that the first-mentioned obligations are not believed to exist as such); but it is certain that the psycho-analyst cannot be thoroughly competent for his task unless he has them in the background of his mind. And I believe that the time will come and is at hand, when it will be found that the physician can often act in both ways as helper to his patients, without either the loss of self-respect or failure to perform both tasks adequately. The universe is not, as I believe, founded in logical "reason" alone, much less in "scientific" reason as that word is usually understood. Moral intuition also plays its part, and probably discovers its right to do so because of inherent necessities and not solely because of utilitarian adjustments" (pp. 446, 447). This is a sturdy confession of faith, and in spite of all its implications it is not without value, coming as it does from one who was so many years a protagonist of a system of psychological inquiry which leads away from, and not towards, the domain of philosophy and metaphysics.

M. B. WRIGHT.

*Psycho-Analysis and the War Neuroses.* By Drs FERENCZI (Budapest), KARL ABRAHAM (Berlin), ERNST SIMMEL (Berlin) and ERNEST JONES (London). Introduction by Prof. SIGM. FREUD (Vienna). Published by The International Psycho-Analytical Press. London. Vienna. New York, 1921, pp. 59.

This small collection of papers has been published evidently with a very definite end in view, to demonstrate that the study of the war neuroses has done nothing to invalidate the Freudian position with regard to psychogenesis of the psycho-neuroses. The view is clearly indicated in Prof. Freud's Introduction. The theory of the sexual aetiology of the transference neuroses can be demonstrated by using analytic technique; the traumatic neuroses, which would of course include many of the war neuroses, can also be brought into line with the sexual hunger (libido) theory, by "advancing and making use of the idea of a 'narcissistic sexual hunger (libido),' that is to say, a mass of sexual energy that attaches itself to the ego and satisfies itself with this as otherwise it does only with an object."

Dr Ferenczi devotes the first part of his paper to a brief survey of the literature on the war neuroses. He points out how the organic-mechanistic

theories which held the field in the early days of the war became steadily replaced by the work of observers who based their practice entirely on the psychogenetic conception of the traumatic neuroses; as he says, "an advance, although one that is not admitted has taken place in the attitude of leading neurologists towards the teachings of Psycho-Analysis." He admits that the sexual foundation of the narcissistic neuroses is less easily demonstrated than in the transference neuroses, especially for those who still have difficulty in grasping the Freudian conception of sexuality.

Dr Karl Abraham quotes from his experiences to prove his contention that the neuroses are not to be understood without taking sexuality into consideration. He gives a short character sketch of the potential war neurotic, which, true as it is of many cases, could not be applied to a large number who have a much more normal previous history. The following are the main predisposing characteristics: lack of initiative and of impelling energy; diminished sexual activity, the sexual libido being checked through fixations, weak potency or potency only under certain conditions; attitude towards the female sex disturbed through partial fixation of the sexual libido in the developmental stages of narcissism.

Dr Abraham points out, as have other writers in this country and America, that the need to face dangerous situations is not the only demand which may prove too much for the stability of the individual. The need to kill, with all its implications, can undoubtedly cause such conflict that a solution may only be found in a withdrawal from the demands of reality to the infantile narcissistic level. In writing of the well-known euphoria of many of the severely wounded, especially in the amputation hospitals, Dr Abraham puts forward the suggestion that "the damaged part of the body receives for them a significance as an erotogenic zone which did not previously belong to it." The word erotogenic in this connection may evoke hostile criticism, but if the word be taken in its true Freudian sense there is no doubt that the mutilated limb or amputation stump can become, for the time at any rate, a true love-object—a symbol not only of a service given to the community but also of security from the re-experience of horror which had been well nigh unbearable.

The paper by Dr Simmel is the least valuable of the series. It is interesting as a record of the value of the cathartic method of treatment in the relief of symptoms, and Dr Simmel rightly does not claim more than this. His "analytical-cathartic" method does not probably differ essentially from the method of hypnosis with abreaction that has been found of service in the hands of other observers, except perhaps that, Dr Simmel being imbued with Freudian doctrines, the so-called abreaction may have been obtained from a deeper or, at any rate, different level of the preconscious than if the war experience only was singled out for revival. The more theoretical part of the paper is lacking in clearness, and the author starts rather many hares in attempting to describe the mechanisms involved; auto-suggestion, auto-hypnosis, dissociation, regression, are all called into service, and the reader is left rather breathless by the statement that the unconscious has a salutary power of attracting an entire psychosis into itself—surely a large mouthful even for the unconscious.

The last paper by Dr Ernest Jones has probably been read by many either in the *Proceedings of the Royal Society of Medicine* or in his *Papers on Psycho-Analysis*. It is, however, well worthy of inclusion in the present volume and will repay very careful study. The Freudian position is again clearly stated, and although admitting that much remains *sub judice*, he demonstrates how,



by a legitimate enlargement of the conception of the libido, the traumatic or narcissistic neuroses can be interpreted in the same terms. The analysis of normal and morbid fear is extremely suggestive, the whole problem of fear being one which in Dr Jones' opinion should be considered apart from that of war adaptation in general.

It is devoutly to be hoped that the war neuroses will soon have an interest which is mainly historical, but three at any rate of the papers in this small volume have a permanent importance. They demonstrate how Freud's "empirical and tentatively progressing theory" is valid for all conditions of psychogenic origin, although other observers have hailed the war neuroses as convincing evidence of the untenability of Freud's main position.

Dr Jones' considered statement should be born in mind. "For my own part I have the utmost difficulty in believing that a current wish, however strong, that is half conscious and sometimes fully conscious can ever in itself produce a neurosis, for it contradicts all one's knowledge concerning the nature of neuroses, as well as my experience, such as it is, of war neuroses themselves."

M. B. WRIGHT.

*The Beloved Ego.* By WILHELM STEKEL, M.D. Authorized translation by ROSALIE GABLER. (Kegan Paul, Trench, Trubner and Co. Price 6s. 6d.)

The author of this book seems to stand at a point between Freud, Jung and Adler, with a strong leaning towards the last-named. He regards the will to power as the fundamental motive in life. Acknowledging his debt to Freud he says he has "retained the best of his teaching, and from it has evolved a new one." In his view "every new soul must mean a fresh problem for the investigator."

Though completely disillusioned as to the existence of any absolute virtue in human beings, he yet obviously retains a strong love for humanity; and while the struggle for power is on the one hand the undoing of mortals, he sees in it, on the other hand, the impulse to individual freedom. What is mostly lost sight of is the need for inner freedom, without which there is no joy in life.

For this lack of freedom the blame falls primarily upon wrong education. Wrong ideals are placed before the child. The early laudations he hears expressed by prepossessed relatives give him an overweening estimation of his worth, which vanishes at the first real contact with the world, and can only be compensated by power-phantasies, and projections into others. Children should be educated to be modest and satisfied, by which means alone can they attain to joy in life. We are to beware of idealism which is only a form of egoism. The will to power erects sublime aims built upon the supposed exceptional character of the individual in question. The neurotic, from coming to have too high an aim arrives at having none at all, and wanders hesitatingly on the path of indecision. All the love the individual gives, not only in childhood but also in later life, is love of himself in another. "From of old the power that makes two people love each other is self-love. Don Juan seeks through a succession of conquests only to find himself." "The boundless over-estimation of the ego has another unfortunate aspect. Through the dis-



appointments of life or other physical causes, it changes into its opposite; because all life appears in a double form (the law of bi-polarity)." This swinging from one extreme to the other confounds all aims, and imperils the happiness of all human relationships. It is egoism that makes the relations between the sexes so covertly hostile.

The author discusses the causes of the general non-success of marriages. "To love means to feel—and where feelings rule, the intellect becomes a hopeless slave." The lover first projects himself into the Beloved, and, rationalizing his choice, discovers only adorable qualities, which collapse as soon as love disappears and is transformed into hate, which in turn magnifies every fault. "Every desire is opposed by another desire which holds it in check." Between the sexes there is a ceaseless conflict, because each individual desires to rule. The subjection of the lover to the loved-one only represses for a season the will to power. The hate which ensues allies itself with the ego in the fight against love; for when we love are we not in the power of another?

"Marriage is a secret struggle between man and wife"; the most peaceful marriage "is an armed peace" or ends in the total submission of one or other party. Happy those rare beings who, capable of overlooking trifles, can concentrate on large aims. "One must not demand everything from love, one must not over-estimate one's own love.... Many marriage soups cannot get warm because one puts too big pots on a small fire." To the author it is clear that this conjugal fight will never end, because owing to the law of bi-polarity every defeat is a victory, and every victory a defeat. Most people have to be content at best with either sensual love or spiritual love, for only the rarely developed and extraordinarily fortunate achieve the great miracle of a really happy marriage in which, in man and woman, sense and soul are equal partners.

The book contains an interesting chapter on Degenerate Children. The commonest cause of such child-failures lies in unhappy marriages. After the pessimistic outlook for conjugal happiness depicted above one would expect to find many more degenerates than actually appear. Nevertheless there can be no doubt of the evil effects of parental quarrels on the psychology of the neurotic or degenerate child. The author has much to say about the evil effects of spoiling children, and little about the equally bad effects of under-estimating and neglecting a child's powers. He does however point out that failure to bring out the real resources of a child (generally because too much is done for him), results in under-development that leads to an overpowering sense of inferiority. Some children are educated in fear and doubt, and subtly robbed of independence and suitable adventure. "They are warned against too great happiness and reminded that tears succeed laughter." Too much repentance and renunciation are demanded, although in another chapter Dr Stekel considers the necessity for renunciation is not sufficiently inculcated. Certain natures seize upon prohibitions as a reason against enterprise. Not only children, but everyone, should be graduated in a noble enjoyment of life—not egoistic joy, and "at any price"; rather "we must love goodness because it is good, and because we wish to represent a higher type of man."

Some of the psychological problems connected with money are discussed here. Perhaps the following, though pleasing, is a little too facile. "Our relations towards money demand a tranquil and firm attitude of mind. The child who can handle money well has a calm conscience, which gives promise

of a strong conscience later on. We should not ponder deeply about money' but should accept it lightly and pass it on. We should acquire and redistribute it, without reflecting upon how much trouble, sweat, blood and worry is attached to it."

In the chapter entitled "Mali-Mali" an analogy is drawn between this curious disease and the followers of fashion. In this hysterical illness the sufferers are obliged to imitate everything that is done by another person. The disease affects the poorer population of the Philippine Islands. When we look into our own civilization we find collective movements which are equally pathological, where the same shibboleths are uttered, the same amusements indulged in, the same fashions followed in clothes, pictures, and music, quite regardless of individual taste.

Under the designation "Half-men," neurotics and others whose will is divided are described. The Whole-men "alone find the middle path amongst all the contradictory influences of ethics, religion, duty and the ego-impulses, without transgressing the boundaries of the eternal laws."

Indulgence in phantasy is described in one chapter as "Psychic Opium." Dawdlers of every sort are recognizable as members of a drugged community. The author thinks the tendency to day-dreaming is at present on the increase, because in this generation children are habitually spoiled.

A number of aphorisms are given at the end of the book, many of which are witty and intentionally paradoxical. In the text of the book, however, several paradoxical and contradictory statements are to be found. This is because the writer himself passes rather carelessly from pole to pole, or because the chapters, which form separate essays, have been written in different moods. The reader will agree or disagree according to whether his opinion is based upon objective or subjective data; for although there is much of value in this book, the issues between the two points of view are somewhat confused, so that one may say of some of the intentionally startling statements that they are never quite true, and never quite false; as for instance the dictum that "every neurotic is a criminal lacking the courage to commit a crime." The reader is forced to ponder whether the neurotic is to be judged from the standpoint of the conscious or the unconscious.

CONSTANCE E. LONG.

*The Form and Functions of the Central Nervous System*, an Introduction to the Study of Nervous Diseases. By FREDERICK TILNEY, M.D., Ph.D., Professor of Neurology, Columbia University; and HENRY ALSOP RILEY, A.M., M.D., Associate in Neurology, Columbia University; Foreword by GEORGE S. HUNTINGTON, Sc.D., M.D., Professor of Anatomy, Columbia University. New York: Paul B. Hoeber, 1921. Large 8vo, xxiv + 1020 pages, 591 figures containing 763 illustrations, of which 56 are coloured. Price, \$12.00 net.

This imposing treatise of more than a thousand large pages and nearly eight hundred fine pictures loses none of its dignity on acquaintance. It certainly is an important reference and text-book for all the classes of scientific folk who are concerned with the *magnum opus* of creative Evolution, the human nervous system.

The contents, divided into fifty chapters, are indicated by the following list:

The Central Nervous System, Its Importance and Significance; Embryological Development of the Central Nervous System; The Unit of Structure of the Nervous System, The Nerve-Cell or Neurone; The Integration of the Neurones to form the Nervous System, The Neurone Theory; Exposure and Investigation of the Spinal Cord *in situ*; The Spinal Cord, Its General Character and Anatomy, Its Coverings and Circulation, Histology of the Cord Segment, The Function of the Gray Matter in the Cord Segment, The Function of the White Matter in the Cord Segment, Its Principal Syndromes; Removal of the Brain and Investigation of the Brain Case; The Medulla Oblongata, Encephalization and a General View, Relations, Surface Appearance and Anatomy, Internal Structure and Histology, Functional Significance, Principal Syndromes; The Pons Varolii, Significance, Anatomy and Embryology, Internal Structure and Histology, Functions and Principal Syndromes; The Cerebellum, A General View of its Evolutional Significance, Relations, Surface Appearance and Anatomy, Internal Structure, Histology and Embryology, Its Functional Significance, The Principal Cerebellar Syndrome and Its Variations; The Midbrain, General Significance, Anatomy and Embryology, Internal Structure and Histology, The Functions and Principal Syndromes; The Interbrain, The General Significance, Anatomy and Embryology, Internal Structure and Histology, The Functions and Principal Syndromes; The Endbrain, The Cerebral Hemispheres; Surface Anatomy, Development and Comparative Morphology, Cerebral Measurements and Cranio-Cerebral Topography, The Coverings of the Brain, The Cranio-Cerebral Circulation, The Cortex; the Medullary Substance, Functional Significance and Principal Syndromes of the Medullary Substance, The Internal Nuclei, Functional Significance and Principal Syndromes of the Corpus Striatum, Cerebral Localization, The Somatic Motor Area, The Somesthero-Sensory, Visual and Auditory Area, The Limbic and Insula Area, The Parietal Frontal and Prefrontal Areas, The Internal Structure of the Hemispheres and the Ventricular System.

There is a useful Glossary of five pages; there are important references for supplementary reading; and a forty-three-page index, invaluable.

"Functions and principal syndromes" are conspicuous, it will be observed. Indeed, an important educative feature of the book is the set of twenty-five or thirty symptom-groups (syndromes) of as many important neuropathological conditions, the latest adaptation of the case-history method. They serve to directly fix in the reader's mind the relation between functioning structures and their respective diseases. "By this method," as the Preface notes, "the anatomy and the physiology of the central nervous system are no longer permitted to remain as independent branches of medical science, but are here incorporated as essential parts of the practical knowledge necessary to the proper diagnosis and treatment of disease."

The authors state that their present work is "designed to fill the gap between morphology and the practical requirements of clinical medicine. It aims to *visualize the living nervous system, to make accessible an appreciation of its vital relation to the functions which go to make up life as well as the defects in these relations which result in disease.*" As Professor Huntington points out in his Foreword, it tends to obliterate the evil "divisions commonly existing between premedical, preclinical, and clinical studies," a consummation,



assuredly, devoutly to be wished. Sometime we shall teach medical students some psychology!

"In addition to much original work, many sources have been drawn upon for neurological facts and interpretations. Chief among these have been the great modern masters of Neurology, Cajal and Déjerine. The more recent contributions of distinguished English neurologists, including such leaders as Gaskell, Elliot Smith, Hughlings Jackson, Head, Sherrington, Horsley, Holmes, Campbell, and Wilson, have provided a wealth of material," while the "American School" of Neurology is adequately represented besides, Herrick, Huber, Donaldson, Jolliffe, Dana, Dercum, Starr, *et al. per terras*. The British reader (on whom the sun never sets) is particularly requested to see evidence herein that Americans (other than the "red" Americans) have long taken much thought in affairs of the nerves and the mind.

The discussion of the cortex and that of the autonomic nervous system are very thorough and timely, and will therefore provide the real student of psychology (Freudian and conservative, both), of sociology, and of applied physiology ("behaviorism"), as well as of psychiatry, what most they need in the present theory of their confluent work. Here is the somatic "sanction" of the subconscious (co-conscious) aspect of mentality well set forth. One may understand a little better than before how affects colour, or even determine, our thoughts; why the great cortex represents movements unlimited but never muscles or glands; what inhibition is; what Head means by "levels"; etc.—just the important base-principles one most needs to know about.

The book is a noteworthy systematic treatise—seemingly an excellent investment for all who have funds of time and interest idle.

GEORGE VAN NESS DEARBORN.

*Man's Unconscious Spirit: The Psychoanalysis of Spiritism.* By WILFRID LAY, Ph.D. London: Kegan Paul, Trench, Trubner and Co. 1921. pp.337. 10s. 6d. net.

Nothing is more surprising to the student of psychical research than the puerility of the criticisms which are from time to time brought forward against it in the name of science. Very few of these critics seem able to discriminate between Psychical Research and the crudest and most uncritical forms of Spiritism, and they write as if of the opinion that "any stick is good enough to beat a dog with." Psychoanalysis is the latest weapon used in the polemic against psychical research and in this book we have what purports to be "A psycho-analytical inquiry into Spiritism, raising the question whether the energy expended by psychics and psychical investigators in their researches may, or may not, be a conscious desire prompted by an unconscious fear"—the fear in question being the fear of death.

The writer says that all true scientific research proceeds according to the "reality principle" and he thinks he is able to show that all psychical research proceeds upon the "pleasure-pain principle." His respect for "the scientist" leads him to say that he alone can see facts, "because he alone is uninfluenced by the ideal of what he thinks facts ought to be or to show. To become a true scientist one has to learn to care not a whit whether a thing is one way or the other, but only to care to find out which way it is." He might have added



that this is also the only way to become a true "psychical researcher." But instead of doing so he draws a sharp line between the former and the latter, and implies that in his investigations the scientist is never deflected from the path of truth by any promptings of his unconscious, or influenced in any way by his wishes or his prejudices; the psychical researcher, on the other hand, is so obsessed by the fear of death that, in the presence of a fraudulently "levitated" table, his desire for everlasting life so disturbs his senses and his judgment that he fails to see the medium's foot which is the cause of the levitation and regards a table thus suspended in mid air as a proof of the immortality of the soul.

Because of the speedy regression to childishness which is brought about in the psychical researcher when the fear of death lays hold of him, Dr Lay would insist that every person who ventures upon psychical research should first be psycho-analysed; for then, presumably, he would be able to see the foot supporting the table (if the light were good) and he would realize that there is no necessary connection between levitation and immortality. One may wonder why Dr Lay thinks it worth while to prejudice psychical research by insinuating that the psychoanalytic doctrine of the influence of unconscious wishes has here some special significance, for he is quite aware that it applies to every form of research whatsoever. Indeed, towards the end of his book he quotes Ferenczi's remarks on this topic: "Unconscious affects (emotions), however, may falsify the truth not only in psychology but also in all other sciences...Everyone who works in Science should first submit himself to a methodical psychoanalysis." This may be very sound advice, but, for the present, it is a counsel of perfection; and in this matter the "scientist" cannot afford to throw stones at the "psychical researcher" until he himself has submitted to a methodical psychoanalysis.

Dr Lay regrets the widespread ignorance about psychoanalysis and says that "almost all people interested in spiritistic phenomena are ignorant of the newer psychology and few of those who know of it have failed to misconstrue it." With equal truth it may be said that almost all people interested in the newer psychology are ignorant of psychical research and few of those who know of it have failed to misconstrue it.

His assumption that all psychical research proceeds according to the pleasure-pain principle leads him to say: "I cannot too strongly emphasise that the abandonment of the reality principle of thought is the first step towards second childhood, and the actions of men of intellect in turning toward spiritism is an unfailing indication of involution, whereupon they cease to be scientists, become first poets, then children and finally infants." This sounds very fine; but does Dr Lay really believe that the late Sir William Crookes, for instance, ceased to be a scientist when he, as a young man, took an interest in spiritism; and does he think that the brilliant researches of Crookes's middle and later life correspond to the mental productions of poets or of children or of infants?

In support of the assertion that knowledge of psychoanalysis is often accompanied by ignorance of psychical research the following quotation may be cited: "The thesis of this book is that all so-called communications, instead of being from a conscious control by another personality, physically separate from the medium, are in reality from an unconscious control by a secondary or subsidiary personality of the medium himself or herself" (p. 86). Does Dr Lay suppose that he is here putting forward a notion that is entirely new?

Does he not know that *as hypothesis* it is as old as psychical research itself and that it has been one of the working hypotheses of students of this subject for more than thirty years? In putting forward this hypothesis as a thesis to be maintained, and in assuming that he has successfully maintained it, he is making pretence to knowledge which he shows no evidence of possessing and is laying himself open to the suspicion that he has but hazy notions of the nature of scientific proof. That his thesis contains the truth is very likely,—the *a priori* grounds for its acceptance are greater than those that can be adduced in support of the spiritist's belief; but *a priori* proof of a thesis has rather gone out of fashion in science and, if he appeals to science, we are bound to ask Dr Lay to point us to the *experimentum crucis* which shall decide between the rival hypotheses.

This he does to his own satisfaction; but unfortunately the "experimentum" is one that has not yet been performed. If you analyse the investigator and analyse the medium, nothing more will be heard of supernormal phenomena. That is the sum and substance of Dr Lay's book, but he gives no indication that either he himself or anyone else has ever carried out the necessary work.

The possibility of utilising psychoanalytic methods in psychical research has not escaped the notice of students of this subject and the importance of the thorough analysis of a medium has been recognized by some of them for many years; but the difficulties of finding a medium willing to be analysed and the *difficulty of analysing a medium* are greater than might be supposed. Had Dr Lay succeeded in doing so and had he been able to bring his results in support of his thesis, we should have acclaimed him as the greatest "psychical researcher" of us all.

T. W. MITCHELL.

## NOTES ON RECENT PERIODICALS.

*Internationale Zeitschrift für Psycho-Analyse*, 1920, part iv.

[Owing to the fact that *The International Journal of Psycho-Analysis*, in English, now covers much the same ground as the *Internationale Zeitschrift für Psycho-Analyse* in German, we shall no longer publish comprehensive abstracts from the latter. It will, therefore, henceforth take its place among others in these Notes on Recent Periodicals. Ed.]

"Some Contributions to the Psychology of Homosexuality," by Boehm, has the first place in this number and will be continued in the next. It consists mainly of descriptive material collected by the author from the social life of an isolated North German seaside town (with its "students' associations"), from a South German provincial town, from a group of people conducting an 'open-air cure' movement, from the field in war-time and from the accounts of medical colleagues in naval and military service. The trend of the evidence is to show the close connection between polygamous and homosexual tendencies and the unsuspectedly powerful factor of *defence against homosexuality* behind compulsive or excessive heterosexual acts (frequenting brothels, etc.). That this is one of the 'masks' of latent homosexuality has long been known; this collection of evidence is interesting confirmation, from observations in 'normal' life, of a fact revealed first by analytic investigation of neurotics.

Groddeck contributes an analysis of a symptom: recurring pain in the legs, ostensibly so severe as to inhibit all mental functioning while the attack lasted. The first association to pain in the legs brought "much walking—the Wandering Jew" and proceeded in the usual way, leading to a revelation of the patient's repressed mockery of, and contempt for, his lame father and identification with him; whereupon the pain vanished. Interesting associations with the idea of pain, the figures of Christ and the Wandering Jew, and the symbol of the cross are discussed, also the question of the use (or misuse) made by patients of reading psycho-analytic literature, always so prejudicial to the treatment.

The shorter communications chiefly concern dreams. Amongst them, Roheim, whose brilliant work on folk-lore, savage rites and customs and so on, is well known, gives two examples of dreams corroborating Freud's hypothesis of a 'primal scene' (*Urszene*) suggested in a recent casuistic study: "The History of an Infantile Neurosis." Very amusing are some dreams recorded by Friedjung which occurred on an occasion when he had promised to telephone to a friend during the night at a certain hour, and thus to fulfil the function of an alarm clock for him. The dreamer prided himself on his ability to wake within five minutes of any specified time, and this narcissistic vanity and the accompanying dread of failure are delightfully evident in the dreams. Moreover, they perform the function of preserving sleep up to the last possible moment and then alarm the dreamer sufficiently to wake him at the correct moment! A quotation from Victor Hugo (*Les Misérables*, t. III, l. v, ch. 5) is included in this section: "...On jugerait bien plus sûrement un homme d'après ce qu'il rêve que d'après ce qu'il pense. Il y a de la volonté dans la pensée, il n'y en a pas dans le rêve. Le rêve, qui est tout spontané, prend et garde la figure de notre esprit.... Dans ces aspirations ou peut retrouver le vrai caractère de chaque homme.... Chacun rêve l'inconnu et l'impossible selon sa nature."

As usual, valuable critical reviews of recent books are contained in this number.

J. R.

*The International Journal of Psycho-Analysis*. Vol. I, part IV, 1920.

The most important article in this number is the opening contribution by Freud, "A Child is Being Beaten." This title is taken from the phrase so often used by patients in giving an account of their "beating phantasies." The frequency of the occurrence of such phantasies in patients suffering from hysteria or obsessional neurosis is a revelation to everyone who takes up psycho-analytic treatment, and this paper of Freud's will be of the greatest value to analysts in their investigation of cases of this kind. Freud describes in particular the growth of the phantasy in women and shows that there are three phases, in each of which there is a difference as regards the relation of the patient to the phantasy and as regards its object, its content and its significance.

In the first phase, which belongs to a very early period of childhood, the child being beaten is never the patient: it is some other child, a sister or brother, who is a rival for the father's love. The phantasy means "My father does not love this other child, he loves only me."

In the second phase the child being beaten is the author of the phantasy, which is now unmistakably masochistic in character. The content of the phantasy is "I am being beaten by my father." This change has been brought about by the sense of guilt that accompanies the repression of the incestuous love for the father which arises at the stage of genital organisation. The phantasy of being beaten by the father is a direct expression of the sense of guilt—a punishment for incestuous love. The love for the father is here subordinated to the sense of guilt but it is not unrepresented in the phantasy. For its repression causes a regression to the pregenital stage of sexual organisation so that the being beaten "is not only the punishment for the forbidden genital relation, but also the regressive substitute for it, and from this latter source it derives the libidinous excitement which is from this time forward attached to it."

In the third phase the child who produces the phantasy no longer appears in it except as a spectator. "A child is being beaten," generally one of a number of children, most frequently boys. The person doing the beating is no longer the father but some



father-substitute such as a teacher or some other person in authority. This phantasy is unlike that of the first phase in that now it is accompanied by strong and unambiguous sexual excitement and so provides a means for onanistic gratification. The form of the phantasy is sadistic but the gratification derived from it is masochistic. The child being beaten is a substitute for the child who has the phantasy.

A paper by Frederic J. Farnell on "Erotism as Portrayed in Literature" is an example of the now common practice of examining literary and artistic productions in the light of Psycho-Analytic doctrines. Such a method of dealing with the works of the poets may be interesting and instructive, but there would seem to be some danger that the psycho-analysts may lose all sense of value and of beauty if they become too curious about the forces at work in the poet's mind when he produces a masterpiece such as, for example, the "Ode on a Grecian Urn," or the "Ode to a Nightingale."

Farnell speaks disparagingly of the attitude of people who "recognize poetry and the novel as a beautiful piece of material...just as they do a piece of statuary or a picture." This he considers being "satisfied with the surface when the real genuine value of the poem or the novel is the interpretation of the writer's own feelings." To the writer of these notes this appears a fundamentally false standard of value and a false canon of art. The genuine value of a poem depends on the universality of its appeal, not on its relation to the poet's feelings. The "Ode on a Grecian Urn" and the "Ode to a Nightingale" have the same magic in them whether or not the reader has ever heard of Fanny Brawne.

In "A Note on Hazlitt," L. C. Martin points out a number of passages in Hazlitt's works "in which he lays stress on the existence in the human mind of motives or emotions which are 'hidden' in the sense that they are unknown to ourselves, or that we refuse to acknowledge their existence." The striking anticipations of Freud's dream theory in Hazlitt's essay "On Dreams" were pointed out by Albert Mordell in his book "The Erotic Motive in Literature," and this note by Martin shows that appreciation of the part played by unconscious motives was a vital element in Hazlitt's outlook during the latter part of his life. Martin thinks that Hazlitt had reached something like "a consistent and dynamic though loosely woven theory of the Unconscious."

The collective Reviews of Psycho-Analytic literature begun in Part III are continued; in the present number the work of French, Dutch, Italian, Spanish and Hungarian writers is dealt with.

*The Journal of Neurology and Psychopathology, Vol. II, No. 5.*

This number opens with an important article on the Argyll Robertson pupil by Kinnier Wilson. Its interest is mainly neurological. Detailed consideration of the anatomico-physiological arc for the light reflex and of the path for convergence and accommodation is followed by the author's conclusions regarding the site of the lesion underlying the Argyll Robertson sign. This he believes to be most commonly found in the neighbourhood of the aqueduct although in rarer cases it may be nearer the back of the eye, in the course of the optic nerve or tract distal to the geniculate bodies.

Maurice Nicoll contributes a paper entitled "Some Analytical Interpretations." Mental development is conceived as consisting of an increasing differentiation of the primal unconscious—a personal differentiation from the collective unconscious. When there is a minimum of differentiation the collective unconscious is realized as if it lay in the outside world; it is projected into the object. This is the source of the magical quality ascribed to objects by primitives and children.

In the next stage, when discrimination between the objective and subjective becomes possible, the unconscious becomes detached from the object and mythology arises. In this way a distinction is made between the world of the psychological realities and the world of the objective realities. The existence of these two phases in the mental evolution of man—the projection of the unconscious into the object and its withdrawal from the object into subjective myths—is held to justify the two-fold interpretation of dreams (the subjective and the objective rendering) on which Jung has insisted.



In the course of analysis elements belonging to the collective unconscious may again be projected into objects in the objective world, *e.g.* the analyst, and to avoid identification with the collective unconscious and the remarkable consequences of this, *these collective psychological contents must be detached from the objects of consciousness and realized as psychological realities outside the individual psyche* (Jung).

Starting from these principles Nicoll goes on to illustrate the interpretation of dreams in respect to their archetypal constituents as opposed to those derived from the personal unconscious. His main example is a castration dream which is interpreted as signifying "the sacrifice of the infantile personality."

Alfred Carver writes a Critical Review entitled "The Wish and the Autonomic System." He deals chiefly with the work of Kempf, who, in a series of monographs and in a big book, has translated the concepts of psychopathology into the language of physiology. The behaviourists' notion that consciousness is superfluous and that conduct can be adequately accounted for without taking it into consideration, leads them to suppose that the only question that psychology has to answer is: What is the organism doing? But, as Carver points out, a complete answer should explain not only what the organism is doing but also why it is doing it. Kempf has taken up this question from the behaviourist standpoint and has tried to demonstrate the physiological basis of the wish. This he finds in a localized autonomic-affective craving which compels the organism to such behaviour as shall satisfy the craving. Thus, the basis of the wish is peripheral. "The essence of Kempf's thesis is the translation of the wish—established by Freud as the unit of psychological process—into terms of indefatigable visceral tonus and postural tensions compelled by autonomic-affective cravings." Carver thinks that further researches are necessary before we can accept the dominating rôle in psychology which Kempf ascribes to the autonomic system.

In an Editorial note on "The Organic Aspect of Shell Shock" it is maintained that "It is far more likely that the emotional 'psychic' state which follows an explosion is due to the antecedent organic reaction of the nervous system than that the organic state—that which gives signs like those associated with hyperthyroidism—arises after the soldier has pondered over the nearness of his contact with death." The possibility of the symptoms of early cerebro-spinal syphilis appearing after stress, accident or concussion and disappearing spontaneously should be taken into account in judging the results of psychological treatment of shell shock—"the cure cannot be allowed in a strictly scientific sense unless the Wassermann reaction has been shown to be negative."

*The Psychoanalytic Review*, Vol. VIII, No. 3, July, 1921.

"The Dream in Russian Literature" is the title of a paper by Gregory Stragnell in which he quotes a number of dreams from the writings of various Russian authors. His contention is that in Russian literature the meaning of dreams was more clearly understood than in that of any other country. They understood the use of the symbol in its relation to everyday life for they were constantly employing it in their carefully censored writings. The strict censorship maintained over all writings in Russia led to many kinds of subterfuge and symbolic writing became an art. "Their constant conscious use of symbolic writing familiarized them with the symbol when they encountered it in their own unconscious dream material."

In "The Parataxes: A Study and Analysis of Certain Borderline Mental States," T. V. Moore introduces some new terms whose use it is to be hoped will not become common. Psychotaxis is used to signify the mental adjustments of individuals to pleasant and unpleasant situations. Positive psychotaxis is the tendency to enjoy to the fullest all pleasant experiences. The opposite tendency to avoid unpleasant situations is negative psychotaxis. Abnormal emotional adjustments are called Parataxes. "The parataxes are elements of the psychoses and psychoneuroses as the psychotaxes are elements of instinctive reactions." Thus, for example, a 'shell shock' soldier who has "nothing the matter with him except that his right arm is trembling" is cured by a few conversations and is sent back to the front where he stays and makes good. "What we are dealing with here is only one element in the hysterical group of reactions, a simple parataxis, and not a psychoneurosis."

The paper deals in some detail with "the parataxis of depression" and "the parataxis of anxiety," but it cannot be said that much is gained by the introduction of the new terms.

"An Autobiography" by C. M. Haviland is an account of childhood experiences written by a young man of twenty-three on the eve of his departure for the battlefields of France. It is an interesting record of the phantasy life of a child and Haviland discusses the psycho-analytic interpretation of its more important sections.

In the "Psychology of one Pantheist" Theodore Schroeder gives an account of Paul Blandin Mnason who was convicted for allowing himself to be worshipped as the Son of God. He led a criminal career until his thirty-sixth year. Then he was converted and soon afterwards claimed to be God. "From the psychological view-point it might be said that Mnason's apotheosis is but a compensatory wish-fulfilling phantasy. For him this served the end of neutralizing a great feeling of inferiority...the whole performance looks like erotomania whose persistent ecstasy is only a psychologic autoerotism, which may be the outlet for any form of repressed perversions of the sexual impulse."

*The Journal of Abnormal Psychology*, Vol. xv, No. 4.

Professor James H. Leuba in a paper entitled "A Modern Mystic" considers the claim made by all mystics and by some philosophers and psychologists that in mystical ecstasy something superhuman comes to expression. He deals with this question in connection with the experiences of Mlle Vé, which were recorded by T. H. Flournoy in *Archives de Psychologie*, tome xv, 1915, pp. 1-224, under the title "Une Mystique Moderne." Mlle Vé at first regarded her ecstatic experience as a manifestation of an impersonal superhuman power which gave her absolute assurance of the reality of the Divine. The experience was repeated thirty-one times and Mlle Vé was able to verify her initial description and to indicate alterations or new features. "This she did with a power of introspection equal to that of St Theresa and a critical ability far beyond hers." In her life there was intense struggle with a forbidden sex passion, and when the connection between this and her trances became clear to her, she had "the most radical doubt as to the nature of the experience." In one place she says, "I almost come to the conclusion that I have allowed myself to be deceived by my imagination, that there is nothing in it outside of my own self." Leuba thinks that these doubts must be accepted as proofs that her assurance referred to a fact not of "immediate" experience—the ground always given by mystics for the noetic value of ecstasy—but to the construction which she placed upon the immediately given. "She could not have doubted her feeling of cold, or her sense of fatigue, or her greater hopefulness; but she could doubt an interpretation of these facts."

"What Drives the Dream Mechanism" is the title of a paper by Lydiard H. Horton, in which he discusses some questions raised by the "Inventorial Analysis of Dreams." He puts forward as the principle of all dream-drives "not any one thing that can be classified under the head of an instinct, a wish, a stimulus from external or internal sources or any form of transmuted mystic energy, but simply the sum or rather the dynamic resultant of a considerable variety of forces impinging upon the nerve channels at the moment." He considers the psycho-analytic formulation of dream processes unsatisfactory because it over simplifies the data of dynamic and social psychology and disregards the large part played by purely physiological and sensory factors in driving the dream.

Daniel H. Bonus contributes a report of a case which disclosed "Over Valuation of the Sexual as a Determinant in the Etiology of the Psychoneuroses."

*The Journal of Abnormal Psychology*, Vol. xv, Nos. 5 and 6.

This double number opens with an interesting paper "On Instincts," by William Morton Wheeler, Professor of Economic Entomology, Harvard University. He recognizes three vital currents of opinion on the subject of instinct corresponding to three different ways of looking at the problem of life in general. These he designates as the theological or teleological, the physiological or mechanistic and the psycho-

logical or anthropomorphic. He indicates three methods of investigating instincts, the experimental, the historical and the psychopathic. The experimental method is of limited service in the departments of biology that deal with the living organism. It is necessary to supplement it with the historical method. He illustrates the use of this method by detailed consideration of three typical insect instincts. The third method, the psychopathic, promises, he thinks, important results and he believes that the work of the psycho-analysts must eventually profoundly affect animal no less than human psychology. He has but a poor opinion of our traditional psychologies which he thinks are about as useful for purposes of understanding the human mind as dissertations on Greek statuary would be to a student eager for a knowledge of anatomy. He says, "After perusing during the past twenty years a small library of rose-water psychologies of the academic type and noticing how their authors ignore or merely hint at the existence of such stupendous and fundamental biological phenomena as those of hunger, sex and fear, I should not disagree with, let us say, an imaginary critic recently arrived from Mars, who should express the opinion that many of these works read as if they had been composed by beings that had been born and bred in a belfry, castrated in early infancy and fed continually for fifty years through a tube with a stream of liquid nutriment of constant chemical composition."

The use of the word-association test for the detection of criminals is illustrated by Herbert Sidney Langfield in a paper on the "Psychophysical Symptoms of Deception." He describes in some detail the performance of an experimental laboratory "crime" and the methods by which the detection of the culprit was effected. He found that decided difference in reaction times and mean variations were much more reliable factors than the quality of the reaction words. Blood pressure records taken during cross-examination showed that the blood pressure of the guilty person rose considerably higher than did that of the innocent one, although the latter was much more nervous than the former.

Cavendish Moxon, writing on "Mystical Ecstasy and Hysterical Dream States," examines a work by Ferdinand Morel of Geneva, entitled "*Essai sur l'Introversion Mystique, Etude Psychologique de Pseudo-Denys l'Areopagite et de quelques autres Cas de Mysticisme.*" Morel regards the whole ecstatic experience as a sexual manifestation which implies a regression to an infantile manner of erotic satisfaction. Moxon shows how Morel's theory of mysticism is supported by the psycho-analytic practice of Abraham and others. The mystics are a sub-class of hysterics and God is a projected image of the narcissistic libido. "We must therefore posit in the mystics as well as in the hysterics a primary auto-erotic or narcissistic activity in the sublimated or spiritualized form of a religious experience or a mystic ecstasy."

"The Kind of Men in State Prison," by A. W. Stearns and John V. Chapman, is an analysis of 107 men admitted in one year to the Massachusetts State Prison at Charleston. Crimes involving sex or personal violence are explained on the ground of low ethical development rather than mental disease or criminal habit. "Stealing lacks the emotional element found in other crimes and is more apt to be due to mental defect or criminal habit. The group of individuals in this class while receiving the shortest sentences seem to present a greater menace to society than those committing legally worse crimes and receiving longer sentences."

George Humphrey writes at considerable length on "Education and Freudianism." His essay is divided into two parts, the first dealing with "The Freudian Mechanisms and the Conditioned Reflexes" and the second with "The Child's Unconscious Mind." He takes as the text of his discourse the book of Wilfrid Lay, entitled *The Child's Mind: The Relations of Psycho-Analysis to Education*. In the footnotes to the two papers there are many references to psycho-analytic publications, but in what purports to be a thorough-going criticism of Freudian doctrine it is surprising to find only one direct reference to Freud's own writings.

The author's purpose is to try to show that all the Freudian mechanisms—the complex, compensation, projection, rationalization, transference, symbolization, and conflict—"are not entirely new and ultimate processes now first brought to light by the school of Vienna, but that they are all explainable in terms of one common phenomenon, viz. the conditioned reflex."

The extent of the writer's knowledge of psycho-analytic method may be judged by the following quotation: "That the method is often successful when applied by a capable physician there is no doubt, otherwise it would not have been practised for twenty centuries by the Catholic Church."

Morton Prince contributes a short paper on "The Structure and Dynamic Elements of Human Personality," in which he shows how the cases of Multiple Personality studied by him corroborate the views of McDougall and Shand on the part played by the instincts and sentiments in the structure of personality.

T. W. M.





PROCEEDINGS OF THE BRITISH PSYCHOLOGICAL SOCIETY  
MEDICAL SECTION

1920

- June 23rd. An Outline of the Idea of Rebirth in Dreams, by MAURICE NICOLL.  
October 20th. Some Biological Aspects of Sexual Repression, by J. C. FLÜGEL.  
November 24th. Study of a Severe Case of Obsessions, by JAMES YOUNG.  
December 22nd. Psychology and the Unconscious, by T. W. MITCHELL.

1921

- January 26th. The Problem of the Neurasthenic Pensioner, by MILLAIS CULPIN.  
March 23rd. "Mary Rose" and the Problem of the Infantile Personality, by  
CONSTANCE LONG.  
April 27th. Enforced Psycho-synthesis in Certain Cases of Analysis, by PAUL  
BOUSFIELD.  
May 25th. Emotion and Eye Symptoms, by W. INMAN.  
June 22nd. The Influence of the Endocrines in the Psychoneuroses, by  
W. LANGDON BROWN.



METHODS OF DREAM-ANALYSIS<sup>1</sup>.

By W. H. R. RIVERS.

THE conditions under which dreams are recorded and analysed have a great influence upon the results obtained in the analysis. Thus, the doctrines concerning dreams held by Freud, Jung and psycho-analysts generally are greatly affected by the fact that most of the dreams they analyse and make the basis of their theoretical views are obtained in the course of psycho-analysis, i.e. in the course of a long-continued process of a complex and peculiar kind in which there is a special relation, again of a peculiar kind, between the person whose dreams are being analysed and the person who is performing the analysis. Freud has even shown reason to believe<sup>2</sup> that some of the dreams of his patients have been the outcome of a wish on their part that the views on which their treatment is being based should be shown to be wrong. If factors, such as resistance to the views of the analyst, which enter into the process of psycho-analysis can have an effect of this crude kind, we can be confident that influences of a far more subtle kind, influences less easily detected, must be continually in action, and that, on the whole, the influence of psycho-analysis will be to produce dreams which will tend to confirm the views of those conducting the analysis. We can have little doubt, for instance, that an analyser who believes, or who is generally supposed to believe, that all psycho-neuroses, if not all dreams, are due to disturbance of the sexual instinct will through this belief, or supposed belief, influence the dreams of his patients and, if he is known to hold this belief, he will produce this effect even if he is careful not to refer to sex in any way in the course of his analysis. It is therefore by no means strange that such a physician as Stekel, who believes that the context of nearly all dreams is sexual<sup>3</sup> and evidently discusses this belief with his patients, should find sexual motives so prominent in their dreams. We can also be confident that one who is believed by his patients, or his prospective patients, to hold this belief will have a similar effect even if he says or does nothing wittingly during the analysis to confirm the belief. At the same time the converse must be true. There is the similar danger that

<sup>1</sup> Read at a General Meeting of the British Psychological Society, July 23, 1921.

<sup>2</sup> *Die Traumdeutung*, 5te Auf., Leipzig and Wien, 1919, p. 106 (Brill's translation, p. 127).

<sup>3</sup> *Die Sprache des Traumes*, Wiesbaden, 1911, S. 13.



analyses of dreams which take place under the dominant influence of one who disbelieves, or is supposed to disbelieve, in the influence of sex will tend to give results in accordance with this attitude, or supposed attitude, of the analyser.

Again, if wishes concerning the truth or falsity of a theory can have the effect on the dreams of patients which Freud supposes, how far reaching must be the effects which such wishes must have upon the dreams of one who has formulated a theory or has adopted with fervour the theory of another. The self-analysis of dreams must be exposed in equal or even greater measure to the possibility of influences tending to produce dreams which support, or can be utilised in support of, the theory which is dominating the dreamer.

Equally important must be the conditions under which dreams are analysed after they have occurred. It must make a great difference whether the dream is analysed at once or after an interval of hours or days; whether the analysis is carried out by the dreamer himself or by another; whether the incidents of the dream are remembered and recorded before the analysis begins or whether they are only brought to light in the course of the analysis; whether the associations with the dream are left wholly open, whether they start from different selected elements of the manifest content, and whether they are assisted by some special process of word-association. Lastly, and perhaps most important of all, it must make a great difference in the case of analysis by other than the dreamer to how great an extent the analyser intervenes in the process of analysis and tends, perhaps even unwittingly, to direct the course of the thoughts to which the analysis leads.

If dream-analysis is exposed to all these sources of error, and we may take it as certain that their influence cannot be excluded, it becomes of the utmost importance that one who utilises dreams in the study of psychological problems should make it his business to record as fully as possible the conditions under which the dreams he studies have been experienced, recorded and analysed. It becomes equally important that those engaged in the study of dreams should consider fully different methods of record and analysis and should seek to discover procedures which will at least reduce to as small proportions as possible the various sources of error to which dream-analysis is open.

As I am at present engaged in such an attempt to utilise an extensive record both of my own dreams and of the dreams of others, I propose to employ this opportunity in giving an account of my own procedure together with a criticism of the procedure now in vogue among psycho-analysts

as a means of producing criticism of my own procedure and counter-criticism of my remarks on the procedure of others.

In describing my own procedure it is necessary to begin with a feature of my own general psychological experience which has an important bearing on my method of analysing dreams.

For many years I have been the habitual subject of an experience in which, as soon as I become aware that I am awake, I find that I am thinking, and have for some time been thinking, over some problem, usually in connection with the scientific work upon which I am at the time engaged. Many of the scientific ideas which I value most, as well as the language in which they are expressed, have come to me in this half-sleeping, half-waking state directly continuous with definite sleep. When I began to analyse my dreams I frequently had a similar experience in which as soon as I was awake I found that I was already having, and had for some time been having, thoughts about a dream, the dream itself being still clearly in my mind. In some cases it was difficult to say where the dream ended and the unwitting analysis had begun, but a distinction was usually possible owing to my lack of imagery when awake<sup>1</sup>. I could be confident that so long as the experience was accompanied by definite imagery it was that of a dream or of a dream-like state, while the period when imagery was absent was one in which I was no longer dreaming, though I had not yet realised that I was awake.

This peculiarity of my experience of the process of awaking introduces a special feature into the records and analyses of my own dreams. There can be little question that the ideal condition for an irreproachable analysis of a dream is one in which the dream is fully recorded before the analysis begins. In this case all danger is avoided that elements derived from, or suggested by, the analysis may be incorporated into the tissue of the dream. In many cases in which I awoke from a dream more or less suddenly I was able to fulfil this ideal condition, but in the frequent cases in which the dream passed insensibly into the half-waking, half-sleeping and unwitting process of analysis, the danger to which I have referred cannot be excluded. The comparison of dreams so analysed, or partially so analysed, with those where the act of awaking was sudden shows, however, that there is little or no difference between them, and I am inclined to regard my unwitting or partially unwitting method of analysis as one especially likely to lead one to the real thoughts and emotions forming the latent content of the dream.

In other cases, after having fully awaked and recorded the dream, I

<sup>1</sup> See *Instinct and the Unconscious*, Cambridge, 1920, p. 11.

would fall into the half-waking, half-sleeping state, and not infrequently it was in this state that the thoughts came which furnished the explanation of the dream. In more than one case this later period of sleepiness passed into one which must be regarded as sleep, for the clue to the nature of the dream came as a definite image. In these cases we may regard the interpretation of a dream as having been furnished by a second dream even though, as matter of fact, this second dream may have consisted only of a single image.

Where the solution of the dream failed to come in this more or less spontaneous way, I adopted the more usual procedure of turning my attention to different elements of the manifest content, allowing any associations so aroused to pass through my mind. I also searched the experience of the day or two before the dream which could have taken part in determining the nature of the manifest content and in some cases found that the experience which had determined the manifest content was of distinct service in the process of finding the deeper meaning of the dream. When I had reached what seemed to me to be the interpretation of the dream I wrote out the analysis as fully as possible and except in a few cases, the exceptions being definitely noted in my records, the complete analysis of the dream had been made and recorded before breakfast on the morning immediately following the dream.

When features of the dream come to mind during the process of analysis I am accustomed to indicate their late coming to mind by enclosing them in brackets, and similarly when elements are added to the analysis after it has been first written out, this is indicated in a similar manner.

So far as I am aware, we have few records of the methods adopted when dreams have been analysed by the dreamers themselves, but so far as can be judged from chance remarks, the method appears in general to be similar to that by which it is customary, and usually necessary, to analyse the dreams of others. At some period of the day following the dream, the dreamer takes different elements of the manifest content and allows his thoughts to rove freely from these starting-points and notes the images and ideas which come into his mind. In other words he imitates as closely as possible the method of free association which it is customary to employ when analysing the dreams of others. We are not told whether the dream is written out before the analysis begins and any further additions clearly distinguished from those already recorded, though it is occasionally mentioned that a feature of the dream only came to mind during the process of analysis. This point is of great importance

in relation to the category of secondary elaboration of which so much use is made by Freud in his theoretical discussions of the dream.

I can now pass to the methods which I have adopted in analysing the dreams of others. I have rarely adopted the usual psycho-analytic procedure in which the patient is made to lie down in the presence of the analyser and started by him upon the process of free association, for I believe that in the majority of persons a state of a hypnoidal kind is thus set up which greatly assists the occurrence of a process of morbid transference. In some cases where I was already well acquainted with the special desires and anxieties of the dreamer the main lines of analysis were already clear as soon as the dream had been related. In such cases I endeavoured by means of guarded inquiries, carefully avoiding leading questions, to ascertain whether this interpretation was justified, and frequently these conversations led me to discover new wishes and anxieties or modifications of those with which I was already acquainted.

In other cases in which the dreamer has adopted a procedure on waking, similar to that followed by myself, I have obtained valuable clues to the meaning of a dream. My method in these cases has been to instruct the patient as far as possible in my own procedure and to make the analysis a matter in which the patient and I are partners.

Before proceeding further I may say that in the majority of cases this process of analysis has led me to wishes, anxieties and conflicts arising out of recent experience which have served to explain, not only the general features of the dream, but also its details. I am ready to acknowledge that a deeper and longer analysis would in many cases have led to earlier and deeper experience, while there can, in my opinion, be no doubt that when the experience of early years has been brought to the surface, or is in course of being brought to the surface during an analysis, desires and conflicts arising out of this experience contribute to the full interpretation of the dream. It seems to me, however, necessary that we should distinguish carefully between certain differences in the subject-matter of dreams which are often confused.

In dealing with this subject I will begin by considering how far the material reached by the customary process of free association can legitimately be held to have taken a necessary part in the causation of the dream. The assumption which underlies the whole construction of Freudian dream-analysis is that the process of free association, starting from an element of the manifest content of a dream, will lead to the discovery of experience which enters into the chain of causation by which the dream has been produced.

I am quite ready to acknowledge that this process leads the analyst



to experience which enables him to understand the state, morbid or otherwise, of the person who is being analysed, and since in many cases this state may have taken part in determining the nature of the dream, the process will, in these cases, give valuable indications of the conditions by which the dream has been produced. It is, however, a purely arbitrary assumption to suppose that every element of experience to which one is led by the process of free association has had a share in the production of the dream except in the very broad sense that behaviour at any moment, waking or sleeping, is determined by the sum-total of the experience of the behavior. Every feature of experience to which one is led by the process of free association may have contributed to the causation of the dream, but it is a pure assumption, and one which needs far firmer foundations than have been provided by the psycho-analysts, that the experience to which free association leads has the importance universally attached to it by the psycho-analytic school.

Except for the practical reason already mentioned, I have no fault to find with the process of free association as an instrument of diagnosis and treatment, or as a means of contributing to the better understanding of the mind or behaviour of the person whose dreams are being analysed, but I need far more evidence than we possess at present to satisfy me that the process of free association starting from an incident of a dream necessarily leads one to experience which has taken any direct part in the causation of the dream, and these doubts become all the stronger, the greater the interval between the dream and the analysis.

I am ready to acknowledge that the special conditions under which dreams are utilised by psycho-analysts should lead to some degree, and perhaps to a considerable degree, of relation between the elements of a dream and experience to which one is led by the process of free association starting from those elements. When the practice of psycho-analysis is in progress from day to day, it is only natural that elements which enter into the causation of dreams should also enter into the chains of association which emerge when an element of a dream is taken as a starting-point. I wish to make clear that I am not objecting to the use of associations starting from an incident of a dream as a process of diagnostic value, while I concede that the special conditions under which dreams are usually analysed by psycho-analysts will probably lead to the presence of a relation, if not a directly causal relation, between an incident of a dream and experience to which the dreamer, starting from that incident, is led by free association<sup>1</sup>. My point is one of scientific

<sup>1</sup> In this case the time-interval between dream and analysis will be of no great importance.

rather than of practical method. I am objecting to the view that experience reached by free association starting from an incident of a dream has any necessary connection with the dream, and I believe that the chance of any such connection is especially slight where only a single dream is analysed, or where the interpretation of a dream does not form part of a long-continued process of psycho-analysis.

The criticism which I am now making of the customary psycho-analytic method of dream-analysis has been foreseen and answered by Freud<sup>1</sup>, but the answer seems to me far from satisfactory. It reveals a failure to appreciate the difference between the value of free association as a method of psycho-analysis, i.e. as a method of practical diagnosis, and its value as an instrument in the scientific study of the dream. Freud answers the objection I am now making by referring to the congruity of the results reached by the method and their agreement with the results of the treatment of hysterical symptoms, in which case he regards the disappearance of these symptoms as evidence for the correctness of the procedure. Freud then launches out into a defence of his method against a charge, very different from mine, that the chain of association is arbitrary and not strictly determined, and he repels the concept of a chain of thought without a definite end. He assumes that in the process of dream-analysis, this end is necessarily that which has determined the nature and course of the dream.

I have already mentioned one factor which is present whenever the dream of one person is analysed by another. In this case a person takes a part in determining the chain of associations who was not necessarily influential in determining the course of the dream. In this case I am very far from denying that the process of free association is strictly determined. I am only being more thorough in my belief in determinism in that I am including the activity of the analyser, whether witting or unwitting, in the process of determination.

Even when the dream is analysed by the dreamer himself, in which case this extraneous element in the process of determination has been excluded, it is wholly unjustifiable to conclude that thoughts reached by the process of free association have necessarily taken a part in determining the dream. It is necessary here to distinguish between two cases, that in which the associations are formed in the fully waking state and that in which they occur in the half-waking or hypnoidal state. In the

<sup>1</sup> *Die Traumdeutung*, 5te Auflage, Leipzig and Wien, 1919, p. 393 (Brill's translation, p. 418); also *Vorlesungen zur Einführung in die Psychoanalyse*, Leipzig u. Wien, 1916, p. 108.

former case it is evident that factors will be present during the process of association which were not present in the determination of the dream, and these additional factors will probably be the more numerous and more influential, the greater the interval between the occurrence of the dream and the time of its analysis. If, on the other hand, self-analysis takes place in the half-waking or hypnoidal state, it becomes far more probable that there will be a relation between the thoughts reached by the process of association and those which have determined the dream, but even here we cannot be absolutely confident that the associations will retrace exactly the path which they had previously followed when, according to hypothesis, they were determining the dream. If a period of wakefulness and witting reflection has been allowed to intervene between the dream and the process of analysis, no believer in strict determinism can arbitrarily reject this period as having played no part in the process by which the later associations have been determined, and the chance that this period has had an effect is the greater, the less free the process of analysis is left and the more the self-analyser adopts the artificial method of directing his thoughts to different elements of the manifest dream. The objection I bring against Freud's method of dream-analysis by free association is that it neglects factors which must be acknowledged to play a part if the doctrine of determinism is to hold good. The thoughts associated with a dream are the more likely to lead back to those by which the dream was determined, the more influences of other kinds can be excluded and the less the degree in which witting processes are allowed to intervene. It is for that reason that I believe the orthodox psycho-analytic method to be unsatisfactory and the method by which I have analysed my own dreams to be that best fitted to bring out the nature of the latent content. I have already mentioned that this method may fail to reach a solution and that in such case success may nevertheless be attained by the use of the method of free association starting from incidents of the dream. Moreover, analysis by another person may succeed where self-analysis has failed. I do not regard my own method as infallible or of universal application, but as one which is free from certain sources of error which must accompany the application of the orthodox psycho-analytic procedure. The assumption upon which my method depends is that the latent thoughts which have determined the nature of a dream during sleep continue to be active on awaking, especially when this waking is only partial, and that the period between sleeping and waking provides the fittest opportunity for the discovery of these thoughts.

SOME ASPECTS OF THE WAR NEUROSIS<sup>1</sup>.

BY GERALD H. FITZGERALD.

Now that three years have elapsed since the conclusion of hostilities, we are in a position to appraise with some degree of accuracy the claims of the war neurosis to be considered as a separate entity. I think that most of us would agree that in a very large number of our cases the underlying factors differ in no marked respect from those encountered in civilian life. It is obvious—leaving aside for the moment one highly important factor, the danger to life—that the unrestrained expression of sadistic instincts must have produced a conflict with which the Ego, enfeebled perhaps by disease and most certainly by the strain of warfare, could scarcely deal. In ill-adapted individuals the segregation from the opposite sex resulted in a reinforcement of the homosexuality sufficient to cause a neurosis, whilst others of tougher mould resorted openly to perverted practices. The attitude to authority again is of self-evident importance. In men who broke down whilst training or after some trifling trauma, the ultimate prognosis is naturally far worse than in those whose neurosis only declared itself after a year or more of exposure to the rigours of the field.

In a different class, however, are the fortunately more numerous type where the constitutional factor is negligible and whose final breakdown is manifestly caused by the unparalleled ordeal of modern warfare.

A frequent history to be obtained is that they carried on well, although perhaps growing progressively more 'windy' and rather less inclined to take risks, until one day some relatively trifling occurrence completely upset their balance. From that moment they became helpless either to lead or to execute commands; and this, I think, is significant: they had a compelling certainty that every shell and bullet they heard was destined for them. The opposing belief in the immortality of the Ego was well expressed by the Tommy's dictum that the shell that was going to get you had your number on it.

Or perhaps a single violent shock, a shell-burst or burial alive may have precipitated the neurosis, although the man had not previously

<sup>1</sup> Read before the Medical Section of the British Psychological Society, 14th Dec. 1921.



noticed any untoward symptoms. These alone are the cases which aetio-logically are to be classified as traumatic neurosis.

Let us consider as briefly as may be the psychopathology of this condition. The possibility of an underlying sexual factor in the war neurosis has of course been vehemently denied, nor, if we limit sexuality to the sense of object love, would it be possible to demonstrate a 'denial of love,' a damming up of the libido sufficient to provoke the flight into disease.

But by a quite legitimate enlargement of the libido concept so as to include not only the love-energy directed upon the outside world, but also that attached to the Ego itself, we can readily appreciate how any force tending to endanger the Ego and threaten its continued existence acts in its effects as an impediment to self love. All the libido is originally narcissistic, and it is only during cultural development that it becomes detached and capable of being utilized as object libido through transference formation. But this detachment is only partial, and the old channels exist whereby it is capable of flowing back to its original fixation point in the primitive narcissism.

The Ego senses keenly an impoverishment for which nothing can adequately compensate; the patient is again in the position of the infant dependent entirely upon the care of its mother, deriving narcissistic gratification by identification of itself with its first love object; and those whose presence tends to disturb this sense of security are regarded with bitter hostility.

The symptoms of the traumatic neurosis,—the deep-rooted sense of injury and injustice, the desire that others should occupy themselves exclusively with their wellbeing, the intolerance of the children whose presence interferes with the wife's exclusive preoccupation with the husband,—are, as Abraham has pointed out, efforts at reassertion on the part of the injured narcissism. The extent of this regression to an earlier psychic level was well seen in many war cases soon after the traumatic event where the patient's behaviour corresponded to that of a little child, needing to be fed and tended, and showing the emotional reactions of the first years of life. The comparative frequency of cases of so-called traumatic epilepsy in which the patient develops fits of an epileptic type after some physical trauma, fits which cannot be attributed to any manifest organic lesion, with the characteristic mental traits of the civilian epileptic, selfishness, egocentricity, impulsive gratification of desires, marks, I think, a similar regressive state, though here the individual was probably before his breakdown ill-adapted to reality, and liable to violent emotional outbursts.

The regression motive is well seen in the recurring dream of a ranker officer whose breakdown developed gradually after three years of strenuous service, following on a severe conflict as to the morality of shooting a German from behind who had turned tail and was running back to his own trenches. He began to develop the feeling already described, that every shell was coming directly for him. Gradually he became less and less able to lead his men in the field, was haunted by fears of cowardice, and finally the explosion of a Jack Johnson nearly knocked the wind out of him and he developed nervous symptoms which necessitated his evacuation. After some months of psychological treatment during which he steadily improved, he dreamt of an earthquake, which at once revived the memory, hitherto repressed, of the explosion; a moderate abreaction followed. On his next visit he produced the following dream: "*There seemed to be an earthquake and I saw the earth open up all around me. There were numberless corpses in their coffins, and the earthquake dislodged the lids. The coffins seemed to rise up out of the ground.*"

On analysis the dream revealed obsessive fears of an earthquake, hurricane, or some such cataclysm of nature which would wipe out the town where he lived, leaving only himself alive. The primitive symbolism of the return to an intra-uterine state and subsequent rebirth is of course clear. This opened up a level of thought hitherto untouched wherein he himself was omnipotent, triumphantly directing the forces of destruction which formed the content of his phobias.

The repetition of the dream after the effect of the original event had been abreacted, and its elaboration in the services of the infantile wish mark, I think, the process of absorption of a traumatically effective stimulus into the general body of the unconscious. This is a point of great theoretical significance and one which, if we succeed in elucidating it further, will lead us far in our examination of the war neurosis. The tendency to recurrence of the war dream, with its culminating moment from which the sleeper awakes shaking with terror, has long been a stumbling-block to the acceptance of the Freudian theories of wish fulfilment. But, on examination, one finds that whereas some war dreams are subject to the usual laws regulating dream activity, others, though a small proportion, repeat themselves throughout long periods with apparently no change of content. These recurring dreams may be, and usually are, exact reproductions of the traumatic moment, though in a much rarer class we have dreams with an elaborate symbolism which throughout numberless repetitions never alter in any particular.

It would seem as if the unconscious were powerless to mould them

or alter their rigid character; the driving affect paralyzes psychic activity, leading the dreamer night after night along the same road, repeating with monotonous certainty the well-worn paths till he awakes sweating with horror, and dreading the return of sleep. Their very rigidity of structure makes them valueless as analytic material.

From the start the dreamer can tell one everything or nothing; the dream may be, and generally is, a photographic reproduction of a traumatic event of which the dreamer is fully cognizant and of which he can speak on the reality level with no notable emotion. In other cases a puzzling symbolization has taken place which leads the dreamer back surely enough to the traumatic moment, but whose elements do not allow of fractional interpretation. The structure here, too, is fixed and unyielding. In one case I was able, under hypnosis, to convert the dream to a hysterical pain, which apparently provided a sufficient outlet, for it never returned.

If distortion occurs it is, as would be expected, in the service of the wish fulfilment and indicates a partial psychic binding of the traumatic affect. This factor is well shown in the following recurrent dream for which I am indebted to Dr Devine. "*I was in the square at Cambrai, the Germans were shelling heavily, as one burst near me I awoke.*" This immediately recalled an incident of which the patient had a full conscious recollection, but careful cross-examination revealed the following significant dream distortion—*there was glass in the windows of all the houses.*

This, he agreed, was a manifest impossibility. The dream wish, therefore, had endeavoured to reassure him of his safety by placing the scene of the bombardment miles behind the line.

Let us consider a few cases in which no such alteration is perceptible.

W. P., a patient of poor intelligence suffering from vague dreads, stammer, broken sleep, in which he constantly lives over a period of horror when he lay buried beneath a fall of earth in the trenches. He tells me of this without marked emotion and of the amnesia following; his next recollection is of hospital in England.

I lay him down and direct him to close his eyes and to take his thoughts back to the time in question. He does so, and in a few moments we have him reacting briskly, gasping and shuddering as the shells burst in his neighbourhood, shouting to his comrades, till finally the trench falls in, and he tells me in broken gasps of the weight pressing on his chest, his efforts to escape, and finally with a convulsive heave he frees himself and sits up. "What happened?" I ask, and he explains that he scarcely knows, he seemed to get free somehow. Thus far we have the

abreaction method on orthodox lines. The man has, we say, freed himself of the affective disturbance by a repetition in consciousness.

But at our next sitting he reports that the dream is still disturbing him. The incident has evidently been insufficiently abreacted. Again he is directed to think of it and gives a repetition identical in every respect to the preceding. The affair drags on; week after week the abreaction takes place, with no less certainty does the dream return. Growing desperate, I try the fatigue method. Three times in one morning does the unhappy patient free himself from his living grave, and the no less unhappy abreactionist is faced with the collapse of all his cherished theories. The patient was eventually discharged from treatment, and is, I should think, probably repeating his nightly excavation to this day. It must be remembered that we were dealing here with a man of poor mentality whose powers of absorption were probably very small. A happier issue attended the following:

S. H. W. A tough, pre-war soldier aged 44, complaining much of sleeplessness, nightmares, and impairment of memory. He talked little of the war, but when he did he laughed about it. Two frequently recurring dreams disturbed his sleep. The first related to a definite incident in which he and a German grappled in No Man's Land, the German grasping him by the throat and endeavouring to drown him in the mud. Eventually as he was at his last gasp, something alarmed the German and he made off towards his own lines.

At the outset of treatment the point at which the patient awoke was always that at which the German was drowning him. He was made to talk over the affair, but there was little or no reaction; he fully realized the horror of the situation, but although it could be vividly recalled there was no perceptible distress.

Imbued, as I then was, with a belief in the theory of auto-suggestion as the factor producing hysterical perpetuation of symptoms, it occurred to me that a repetition of this kind might perhaps be analogous to the persistence of deaf-mutism, so often seen in soldiers after a shell-burst. Symptoms such as this were of course readily removable by persuasion, coupled with an explanation of their mechanism adapted to the patient's intelligence.

I therefore explained to the patient that the return of the dream was conditioned by his belief in the inevitableness of the repetition, that if he could rid his mind of this certainty, etc., he would be troubled no more. Next week he reported that the dream had certainly recurred, but missed out the crucial incident; he simply found himself lying in



the mud, and the German walking back to his lines. He awoke laughing. After this there was no repetition.

The second dream proved more obdurate. As he lay in bed he heard footsteps mounting the stairs, someone went into his son's room, there was a blow and the thud of a body falling on the floor. He awoke regularly, sweating and terrified. For some sittings nothing could be elicited, but at our eighth interview he recalled a singularly unpleasant experience when a number of Germans were murdered in cold blood. The thud he associated with the felling of an officer with a rifle-butt. For three weeks, under persuasive methods, the dream disappeared, but recurred under the stress of a domestic anxiety. The inhibitions had, however, become so far removed that he was able, on hearing the footsteps to say, "It's only a dream." Nevertheless he felt impelled to leap out of bed and visit his son's room to reassure himself that the lad was safe. The dream crossed his mind subsequently in sleep on a few occasions, but the anxiety vanished. It is evident that we are dealing here with a dream which, although recurrent, has at the outset effected a partial fusion with unconscious material. Nevertheless, its employment in the services of the dream wish was far from satisfactory. The compelling force of its affect rendered it incapable of distortion and elaboration; it could be utilized only to express in a crude and violent manner a danger situation which provoked in the dreamer not surprise or sorrow, the normal response to such an apparent death wish, but only feelings of alarm which called forth a reaction of self-preservation. In the threat to his child, he sees a threat to his Ego, and responds to it in narcissistic fashion by a compulsion to reassure himself that all is well.

A third case presents another and more complex aspect. H. F., a man of 46, an obvious martial misfit, a small unambitious clerk, employed in a subordinate position with the same firm for sixteen years. After a short time at the front he was blown up and buried, and for some hours lay practically covered with *debris*, and in great terror lest he should be left there forgotten. Two dreams relating to this incident occurred regularly and had done so for over two years, accompanied with much painful emotion. Although rather long they are worth quoting *in extenso*, to show how an elaborate symbolism such as they exhibit can nevertheless take on a stereotyped and rigid character, which altered not at all despite numberless repetitions.

Dream I. *In the dark I came to a kind of structure and as I looked into it I saw that the only light came from above. I looked up and saw a man at work. My first thought was to reach him. There was no other means*

but by climbing through different floors which could be seen through, they being a kind of lattice work interwoven, after the pattern of bed laths. In some way or other I reached the first obstacle in my endeavour to get to the top, but as I grasped the laths they began to bend, so much so that in my frightened state I thought they would break and I should drop. Each floor I climbed through seemed more difficult, the laths bending more as I got nearer the top. I had come to the last floor and was almost at the top when the laths bent to the point of breaking. At that moment I woke up feeling bad.

Dream II. I found myself in a vault and as I groped about in the darkness I found that my only way out was up a kind of shute, but to my amazement I could not ascend it, for a massive stone barred the way. Persons above were trying to rescue me and several attempts were made with chains and ropes fastened round the stone, but every time the stone got hauled up about halfway, the chains and ropes broke and down came the stone again. In my terrified state, thinking I must remain there and die, I saw around me many skeletons of persons who had met a similar fate to that which faced me. At the point of giving up hope of being rescued, I awoke.

It would seem almost as if the unconscious in the interests of the primary dream function—the preservation of sleep—had succeeded by a supreme effort in effecting just so much disguise—or, from a standpoint which we shall consider later, in attracting to itself and fixing a certain measure of the traumatic affect, but was powerless to utilize it in any further way.

The unconscious impulses which attain their expression in the dream we are accustomed to consider as under the dominance of the Pleasure Principle; but here we seem to see them set aside, and mastered in their turn by something which appears more primitive—or at least more powerful, the *compulsion to repeat*. Let us attempt a theoretical explanation of these problems.

We have already seen that in the traumatic neurosis it is the libido attached to the Ego itself that is, through the agency of a violent threat to the continued existence of the individual, withdrawn from the outer world, and regresses to infantile modes of expression.

But many of these infantile reactions become in the course of cultural development obsolete and forbidden modes of expression and cannot be tolerated by the Ego, which through its adaptation to the Reality Principle feels them to be inimical to its safety. Thus sexual hunger, whether it be that caused by the damming back of Object or of Ego libido, causes a tension within the psyche which can only be relieved by the production of morbid anxiety (*Angst*). This morbid anxiety the Ego

tends to project as if the threat came from without—a point which we shall consider in more detail later—and to guard itself against it by the formation of various phobias and prohibitions, which serve as defence mechanisms against the formation of morbid anxiety. The morbid fear of the soldier on the battlefield is in a certain sense as truly a neurotic symptom as that of the woman seized with terror at the sight of a cat. For as Jones<sup>1</sup> has shown, the normal response to danger is a conation—flight, defence or retaliation. The production of morbid fear is in no sense a useful reaction, for it serves by its very intensity to inhibit motor activity, to drain off all psychic energy into one unbearable emotion. Thus far we are on familiar ground. Morbid anxiety is the state of awaiting danger, and differs from fear in so far as the individual is unable to react by the appropriate conation. It seems probable that the measure of *Angst* production is the extent to which the conative response has been ineffective or inadequate.

But a danger totally unprepared for causes neither fear nor *Angst* but alarm [*Shreck*], the suddenness allows no time for preparation or motor activity: the psyche appears transfixed by the sudden impact of the stimulus. It is in these cases that one encounters the phenomenon of the recurrent dream.

We have now two problems to consider. Can this repetition of the traumatic moment be in any sense a function of the Pleasure Principle, which we have hitherto regarded as paramount in the psychic life of the unconscious; and what are the mechanisms whereby a psychic trauma tends constantly to repeat itself with fresh affective force?

Freud, in his earliest essays on the problem of hysteria, formulated the concept that the hysteric *suffered from reminiscences* and showed how a stimulus of a certain intensity experienced in early childhood was repeated in a disguised form throughout life as a neurotic symptom. When the affect attached to this stimulus was brought up to consciousness the patient abreacted it, and by this means was enabled to obtain relief. It appears, of course, regularly during analytic treatment in the phenomena of the transference.

The instincts are the richest source of stimuli reaching the consciousness from within, and we may venture the supposition that the stimuli arising from them have not the characteristics of fixed nervous energy but that which is freely flowing and seeks an outlet. To their free state they owe the power of combining in the foreconscious with the day remnants, which as it were fix them. It is only then that they can be

<sup>1</sup> *Papers on Psycho-Analysis*, pp. 578 *et seq.*

utilized by the Pleasure Principle, which owing to this psychic binding can obtain the mastery and submit them to elaboration, according to the laws of the unconscious. If this fixation fails, as not infrequently happens with the psychic traumata of childhood, a derangement analogous to a traumatic neurosis results, even though the event itself has never become conscious. But this 'compulsion to repeat' (*wiederholungszwang*), which has well been compared to a conditioned reflex, does not function in opposition to the Pleasure Principle but independently of it. During the course of a psycho-analytic cure, it is evident that the force compelling the patient to repeat through the transference the repressed remnants of his early memories is not held in fixation, and although not necessarily unpleasant—it may, for example, result in the repetition of a disguised erotic situation—functions without regard to the Pleasure Principle. When, as in the examples we have considered, the memories revived are of a kind which contain no possibility of pleasure, the individual appears as if a diabolic fate pursued him, from which there is no possibility of escape.

In a recent work of some difficulty<sup>1</sup>, Freud has devoted fuller attention to this abrogation of the Pleasure Principle, in favour of what appears to be a more primitive tendency of the psychic life, and it will be of value to consider his speculations concerning the nature and functions of this compelling force.

Two salient characteristics at once seize our attention—the moment of surprise and terror, the importance of which has already been considered; and the well-known fact that a wound received at the same time serves to protect against the formation of a neurosis. But if one thinks it self-evident that the nightly dream takes the patient back to the traumatic moment, as a measure, as it were, of its force, one mistakes the true nature of the dream, whose function should be to bring him back to health and the hoped for cure.

Either we must postulate a little understood masochism, or, as we have already done, a weakness in the dream structure.

In a brief discussion of the motives actuating the imitative games of childhood, Freud demonstrates that the child by substituting an active for a passive *rôle* strives to render itself master of events which have produced a lively impression upon it. These events are not necessarily pleasant in themselves, as, for example, the familiar games of doctors and patients, and one may assume that the gain of pleasure is secondary to the impulse to abreact the incident. May it not be that this impulse

<sup>1</sup> S. Freud, *Jenseits des Lustprinzips*.



towards mastery by repetition is the underlying motive of the compulsion to repeat?

Psycho-analytic theory assumes that consciousness is only a special function of the psyche, regarding it indeed as comparable to an end organ. But, since the system of perceptual consciousness is capable of receiving impressions both from without and of pain and pleasure from within, we must, if we accord to it a spatial relation, regard it as being directed outwards and encompassing the other psychic systems. If, however, it is to retain its function as a receptor, it cannot preserve within itself the results of such impressions as a permanent trace, for to do so would render it increasingly less fitted to receive new stimuli and transform them into consciousness. Memory traces are formed by the propagation of the impulse to the next inner system, and the phenomenon of becoming conscious (*Bewustwerden*) is the product of a transformation of a memory trace into the moment of exposure in consciousness, that is to say of its direct communication with the outer world. Using as an illustration a small ball of protoplasm in the midst of a world full of violent energies, Freud discusses the effect that a constant bombardment of stimuli would have upon it. The outer layers would tend to become specially modified to serve as a receptor, and stimuli would pass through it without resistance and producing no permanent change in its structure. But the stimulus in passing from the outer to the inner layers has to surmount an obstacle and in its passage leaves a permanent trace.

The unimpeded passage of stimuli might, however, result in injury to the organism, and thus it would happen that the outermost layer loses its living structure, becomes as it were inorganic and acts as a special membrane, which preserves the organism from the forces of the outer world, in such a way that they only penetrate the inner layers with a portion of their energies. The outermost layer has by its death protected the inner layers, provided the stimuli are not sufficiently powerful to force a passage. This layer or barrier, which Freud has called the *Reizschutz*, is provided with an energy of its own, and serves above all to preserve the organism from the effects of dangerous stimuli in the outer world. The receptor within seeks to recognize the force, the intention and the nature of the excitations which reach it from outside. For this it suffices to take small amounts of energy and examine them. Thus in the process of evolution the central nervous system has gradually withdrawn from its exposed position as the primitive ectoderm and those portions of it remaining on the surface, the sense organs, adapted for the reception of specific stimuli, are capable of receiving only very

small amounts of energy, so that one might compare them to antennae, which but touch the outer world, to be immediately withdrawn.

We have seen that our little ball is protected by the *Reizschutz* from the outer world, and that the next inner layer must serve as a receptor. This becomes later the organ of consciousness and on account of its position on the frontier between the inner and the outer world serves also to differentiate between stimuli arising from one or the other. But stimuli from without reach it only in small quantity, for their passage is impeded by the *Reizschutz*, whereas those from within can reach it in undiminished force, and thus tend to be more effective. If these inner stimuli reach a degree sufficient to cause pain, so as to constitute a threat to the Ego, the tendency is to treat them as if coming from the exterior. In this way the barrier of the *Reizschutz* may be used against them. *This is the mechanism of Projection.*

Stimuli from the outside strong enough to effect a penetration of the *Reizschutz* become traumatic. The overwhelming of the psyche by a great flood of stimuli must in some way be impeded. What reaction in the psychic life can follow such a penetration of the *Reizschutz*? All the defence mechanisms of the organism are called into play. The problem is to control the stimuli and effect a discharge. From every side the energy belonging to the organism is gathered up to form at the point broken through a counter-charge of energy, and on this account all the other psychic systems are impoverished or paralysed. The counter-charge thus formed serves to bind the incoming stimulus and in so doing is transformed from freely flowing energy to energy at rest. If the shock be sudden the tension at the point of entry will be low and the penetration of the *Reizschutz* therefore relatively more easy. On the other hand, if there has been a preparation by morbid anxiety for shock with the consequent formation of a counter-charge of energy in the systems nearest to the threatened point, the penetration will be more difficult or even impossible. Morbid anxiety forms, therefore, the last line of defence of the *Reizschutz*. Above a certain strength of trauma, however, it matters little whether a system be prepared by anxiety or no.

The dreams following trauma of an overwhelming sort seek therefore to achieve the mastery of the excitation by the development of anxiety, whose lack has been the cause of the neurosis. In this sense they may be regarded as an attempt at cure by a psychic binding of the invading stimulus.

The fact already referred to that a physical injury received at the same time prevents the development of a traumatic neurosis can be

explained if one considers that the surplus excitations received through a penetration of the *Reizschutz* are fixed by means of a narcissistic conversion on the part of the injured organ. It becomes thus a love object, and the stimulus in a sense transformed to object-libido. The well-known satisfaction of men who had received 'A Blighty one' and the happy atmosphere prevailing in Surgical Hospitals is thus comprehensible in terms of the libido theory.

As this transference weakens with the healing of the wound, a neurosis may develop, or the Ego strive to protect itself from the release of the attached energy by a hysterical continuance of impaired function. One is often struck in the gymnasium attached to the London Neurological Clinic by the extreme content of the men with their crippling functional disabilities. Nor can the resistance against cure be regarded as other than a protection against the results of the release of energy from its satisfactory fixation—that is, against the development of morbid anxiety. Abreaction would, therefore, seem to be effective in so far as it aids in the fixation process by the deliberate production of *Angst*, against which the patient has opposed the resistances of the Ego, conscious and foreconscious.

Considerations of space have compelled me to omit all reference to the close parallelism between the concept of a profound narcissistic regression and the return, from a physiological standpoint, to the phylogenetically earlier biochemical control of function by the endocrines.

It is significant, however, that those cases of traumatic neurosis whose symptoms most clearly resemble a pure hyperthyroidism react unfavourably to psycho-therapy. For the extent of the regression measures, in some respects, the prospect of ultimate recovery.

## EXPERIMENTS ON THE ASSOCIATION TEST AS A CRITERION OF INDIVIDUALITY.

By W. WHATELY SMITH.

THE object of the experiments described below was to ascertain whether, and to what extent, the distribution of affective tone evoked in the course of a word-association test is uniquely characteristic of the subject concerned. For reasons which I shall give later I consider this question to be of considerable importance.

In order to investigate the point, I induced six subjects to undergo repeated tests:

Subject P 1 was tested on 6 occasions

„ P 2	„	8	„
„ P 3	„	8	„
„ P 4	„	6	„
„ P 5	„	10	„
„ P 6	„	6	„

The general procedure was substantially the same as that described in my paper on Memory and Affective Tone<sup>1</sup>, but I did not take reaction times and relied solely on the psycho-galvanic-reflex as a measure of the affective tone evolved. I did this partly because I believe the reflex to be far more reliable than reaction time<sup>2</sup> and partly because I wished, for external reasons, to shorten, as much as possible, both the experiments themselves and the subsequent calculations.

I also made certain changes in the list of words used. It is obvious that to use a list containing any considerable number of words likely to arouse intense affective tone in *all* subjects would tend to obscure the individual differences which I was anxious to investigate. The ideal would be to use a list containing only words of no universal interest which would, therefore, only evoke affective tone by virtue of their associations with experiences peculiar to the individual; but this is scarcely practicable.

As an approximation to this I deleted from my original list the 20 words which, in my previous experiments, had aroused the most intense

<sup>1</sup> *British Journal of Psychology*, General Section, Jan. 1921, p. 236.

<sup>2</sup> *British Journal of Psychology*, Medical Section, Vol. 1, p. 293 *seq.*



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affective tone in subjects as a whole. These, in the order in which they appeared in my original list, were:

Woman, Dance, Proud, Habit, Pray, Money, Despise, War, Child, Marry, Fight, Family, Name, Afraid, Love, Kiss, State, Happy, Wound, Divorce.

I replaced these by the following 20 words which I judged less likely to arouse intense affective tone in the average subject:

Window, Pay, Mountain, Justice, Hat, Paint, Wild, Month, Brown, Dog, Help, Apple, Waste, Fast, Purpose, Knife, House, Coal, Fire, Hotel.

The list then ran as follows:

Head	Blue	Frog	Wait
Green	Lamp	Try	Cow
Water	Carry	Hunger	Waste
Sing	Bread	White	Luck
5. Dead	30. Rich	55. Brown	80. Horse
Long	Tree	Speak	Table
Ship	Jump	Pencil	Work
Make	Pity	Sad	Brother
Window	Yellow	Plum	Fast
10. Friend	35. Street	60. Dog	85. Purpose
Cook	Bury	Home	Chair
Ask	Salt	Nasty	Worry
Cold	Dress	Glass	Knife
Stalk	Justice	Help	Motor
15. Pay	40. Hat	65. Wine	90. Clean
Village	Paint	Big	Bag
Pond	Silly	Carrot	Choice
Sick	Book	Give	Bed
Mountain	Wild	Doctor	House
20. Bring	45. Finger	70. Travel	95. Coal
Ink	Month	Flower	Shut
Angry	Bird	Beat	Fire
Needle	Walk	Box	Evil
Swim	Paper	Old	Hotel
25. Go	50. Wicked	75. Apple	100. Insult

Each time that I tested a given subject I called out the words of the list in a different order. Thus I first gave them in the order shown above; next backwards; then in the order 1, 3, 5, 7, . . . 99, 2, 4, 6, 8, . . . 100; for the third test I used the order 100, 98, 96, . . . 2, 99, 97, 95, . . . 1; and similar systematic alterations of order were made for each test.

There were several reasons for doing this. In the first place I wished to eliminate, as far as possible, any effects due to preselection, and reversing the order of the words is calculated to do this to some extent.

Secondly, I feared that if I always used the same order the subjects would soon begin to remember which word was coming next, and this would be apt to interfere with the success of the experiment. Thirdly, some subjects have a tendency to 'settle down' in the course of the experiment and to give smaller reactions towards the end than at the beginning, while others behave in the opposite way.

By varying the order of the words such sources of error can be minimised.

In order to eliminate the danger of the results being unduly influenced by tests, the absolute magnitude of whose reactions might happen to be abnormally large or small, I adopted the same 'percentage method' which I used in my experiments on nonsense syllables. That is to say, I expressed each reaction as a percentage of the arithmetic mean of the series to which it belonged; each series, therefore, was of equal weight in determining the final results no matter what the absolute magnitude of its mean reaction might be.

The tests on each subject were carried out at intervals of two or three days.

In order to ascertain the average consistency of individual subjects—the extent, that is to say, to which an individual's reactions on one occasion resembled his reactions on another—I divided the tests for each subject into two equal groups, taking the first three, four or five tests, as the case might be, as one group and the last three, four or five as the other group. Thus for subject P 1 the first group consisted of tests 1, 2 and 3 and the other of tests 4, 5 and 6, while for subject P 5 one group consisted of tests 1, 2, 3, 4 and 5 and the other of tests 6, 7, 8, 9 and 10.

In each such group I computed the mean percentage reaction for each word in the series. For example:

*Subject No. P 1*

Reactions as percentages of their respective means.

Word	1st Test	2nd Test	3rd Test	Mean of 1, 2 and 3	4th Test	5th Test	6th Test	Mean of 4, 5 and 6	Mean of all tests
Head ... ..	86	0	0	29	0	55	71	42	35
Green ... ..	10	0	0	3	0	0	71	24	14
Water ... ..	0	65	0	22	0	0	0	0	11
Sing ... ..	76	0	0	25	0	0	0	0	12
Dead ... ..	257	588	145	330	251	276	213	248	289
etc.									

I also calculated the mean percentage-reaction for all the tests, as shown above.

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In order to ascertain what kind of effect is produced by using the means of two such groups of tests for each subject, instead of relying on a single pair of tests, and thus to gain some idea of how many tests it would be desirable to use in order to obtain reliable results in future work of this nature, I worked out the coefficients of correlation between the deflections given by the first test and the second test respectively in the case of each subject. The results were:

### *Correlation:*

First and second test for P 1 + .69		
"	"	P 2 + .39
"	"	P 3 + .18
"	"	P 4 + .44
"	"	P 5 + .35
"	"	P 6 - .01
Mean ...		+ .36

If these values are compared with those obtained from the correlation of the means of the groups it will be seen that the effect of taking the mean of several tests as a basis of calculation is greatly to increase the correlation and to eliminate the discrepancies between individuals.

I next calculated the coefficient of correlation between the means of the two groups ( $M_1$  and  $M_2$ ) for each subject and obtained the following figures:

### *Correlation:*

First group ( $M_1$ ) with second group ( $M_2$ ) for P 1 + .98		
"	"	P 2 + .72
"	"	P 3 + .70
"	"	P 4 + .60
"	"	P 5 + .68
"	"	P 6 + .42

The mean of these coefficients of correlations is + .68. If they be weighted in proportion to the number of observations on which each is based the weighted mean is + .685.

This value is important; it is the mathematical expression of the extent to which an average subject agrees with himself, so to speak, over a period of the duration here involved (*i.e.* about 3-4 weeks).

The next step was to ascertain the extent to which subjects agree with each other. To ascertain this I worked out the coefficient of correlation between the mean percentage-reactions of all tests ( $M_3$ ) for each subject with every other subject. The resulting figures were:

Mean of P 1 (all tests) with mean of P 2 (all tests) + .19

„ P 1	„	„	P 3	„	- .02
„ P 1	„	„	P 4	„	+ .12
„ P 1	„	„	P 5	„	- .01
„ P 1	„	„	P 6	„	+ .02
„ P 2	„	„	P 3	„	+ .15
„ P 2	„	„	P 4	„	+ .19
„ P 2	„	„	P 5	„	+ .18
„ P 2	„	„	P 6	„	+ .01
„ P 3	„	„	P 4	„	+ .46
„ P 3	„	„	P 5	„	+ .14
„ P 3	„	„	P 6	„	- .24
„ P 4	„	„	P 5	„	+ .23
„ P 4	„	„	P 6	„	- .04
„ P 5	„	„	P 6	„	- .13

The mean of these values is + .08. If they be weighted in proportion to the product of the number of observations on which each series correlated is based the weighted mean is + .09.

It will be noticed that with one exception (subject P 3 with P 4)<sup>1</sup> the correlation between any two subjects is very markedly lower than that between the two groups of any single individual subject. This is what we should expect on general grounds; for, if we eliminate words of universal appeal from the list, the affective state evoked by any word in a given subject must be a product of that subject's personal experience: and the experience of every individual is unique.

In accordance with the ordinary laws of probability we should expect to find certain proportions of abnormally high and low values in each class of correlation (*i.e.* 'individuals with themselves' and 'individuals with each other') but the majority of values in each should approximate to the mean. We thus find the very high value of + .98, for subject P 1, and the very low value of + .42, for subject P 6, in the first class; and the very high value of + .46, for subjects P 3 and P 4, in the second.

If we had at our disposal a sufficiently large number of values to give us the frequency distributions of values in the two classes we should doubtless obtain two overlapping curves of the approximate form shown in Fig. 1.

The one would have its maximum at approximately + .7, the other at about + .1. The precise position of the maximum would depend, *inter alia*, upon the number of words of universal appeal which the list contained. If there were none the maximum of the dotted curve would be exactly at 0 and it would, presumably, be symmetrical, while that of

<sup>1</sup> This is almost wholly due to two words, 'sad' and 'waste,' which greatly excited both subjects: without these the figure would be about + .09.



the full curve would be at about  $+ \cdot 6$ . Any increase in the number of universally exciting words would shift the maxima towards the right and, incidentally, bring them closer together; for if the list were composed exclusively of 'universal' words the element of individuality would *ex hypothesi* be eliminated and the curves would coincide with a maximum at  $+ 1 \cdot 0$ , becoming vertical straight lines in the process.

From such curves it would be possible to calculate the precise chance that a given coefficient of correlation between two series of reactions of unknown origin arose from correlating the reactions of the same individual or of two different individuals.

For practical purposes, however, such refinements are unnecessary; we may say with considerable assurance that in general the correlation of individuals with themselves is about  $+ \cdot 60$  to  $+ \cdot 70$  while the correla-

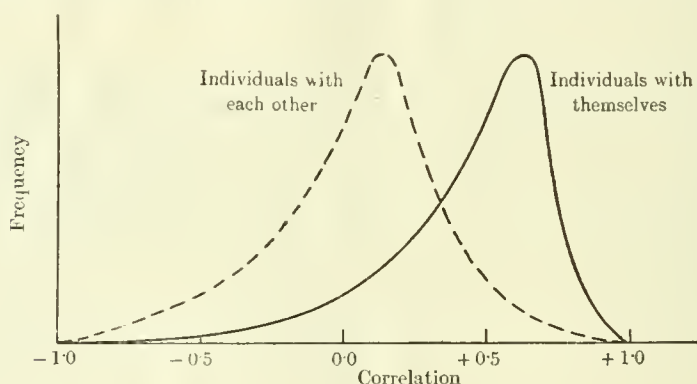


Fig. 1

tion between different individuals is not likely to be greater than  $+ \cdot 2$ . The relevance of this conclusion to possible future investigations will be dealt with later.

It is necessary to give, at this stage, a few observations as to the experimental conditions under which this work was done and the probable reliability of the results obtained. I experienced a good deal of difficulty from cold weather which prevailed during part of the work and which was aggravated by the coal strike. I found that when subjects were cold and their skins dry and contracted they generally gave unsatisfactory reactions. Sometimes they refused to react at all and I was obliged to discontinue and to postpone several tests on this account. When they did react they generally gave very small deflections with a distinct tendency towards an 'all-or-none' type of reaction. That is to say they

would give long runs of very small deflections, or of none at all, with what seemed to be disproportionately large deflections for such few words as produced more than this minimal response. The effect of this is somewhat to increase the tendency of subjects to correlate highly with themselves and only slightly with each other, but I consider that this is at least discounted by the fact that such relatively unsatisfactory series of reactions appeared to be much more erratic than the more satisfactory series. Several of the tests in this experiment were as good as any I have observed and I received the strong impression that these 'conformed to type,' for any subject, much more closely than did the less good tests. That is to say I anticipated large reactions on words which had previously excited the subject with far greater confidence when the test was one of first class reliability than I did when it was not.

My opinion is that, in so far as the experimental conditions were adverse (and of course I never continued a test unless it was reasonably satisfactory), the effects very approximately cancelled each other, tending on the one hand to accentuate and on the other to diminish both the agreement of individuals with themselves and their lack of agreement with each other. This opinion is, of course, purely subjective, but it is based on a fairly extensive experience of using the galvanometer in conjunction with word-association tests and I have little doubt as to the reliability of the results obtained. Provided the tests are reasonably numerous and spread over a period of not more than a month, and that a suitable list of words is used, individuals will, in general, show a correlation with themselves of not less than  $+ .6$  and, with each other, of not more than  $+ .2$ . (There will, of course, on the theory of probability, always be an occasional exception, as already pointed out.)

I may now pass to what I conceive to be the potential value of this method. I consider that it is likely to prove useful in the investigation of those phenomena of 'dissociation' and 'multiple personality,' in which whole tracts of experience, so to speak, appear to become detached from, and to function independently of, the main mass of experience which determines the 'normal' personality. There are, roughly speaking, two alternative views as to the kind of process which results in these conditions. On the one hand they are regarded as no more than special cases of the general process of 'repression,' differing only from other instances of the same process in the extent and sharp delimitation of the mass of experiences repressed and in the intensity of the repression. On the other hand it is suggested that some special process comes into play—a process distinct *sui generis* from anything operative in the normal mind—

and that, as a result of this, the experiences concerned are actually, in some fashion, split off from the main mass and segregated, so to speak, into a water-tight compartment of their own. According to this view they are inactive, incapable of exerting any influence on mental-activity in the normal state, wholly autonomous and separated from the general mass of experience by an impassable barrier.

I, personally, incline very strongly to the former view with which I suspect that most psychologists would agree; but support of the other view, or of something closely resembling it, is not lacking from authoritative quarters.

This is the sort of point which might, in my opinion, be elucidated by the method which I have here described and in some measure tested. If it be conceded as a result of these experiments that it is possible to obtain a characteristic chart, so to speak, or at least to achieve a representative sampling, of a subject's mind by such means, it should be possible, in the light of this knowledge, to investigate the problem experimentally.

Consider a well-marked case of double personality in which the subject shows two alternative states 'A' and 'B' of which we will suppose that A is the normal, or relatively normal, state. If we test the subject in the A state on ten occasions, say, we shall obtain, if we use a reasonably large list of words, a set of mean reactions characteristic of the mental content determining that state. A similar testing of the B state will give us a set of reactions characteristic of the mental content of *that* state. If the correlation of these two sets of mean reactions proves to be of the same order as the correlation of an individual with himself—*i.e.* of the order of  $+ .65$ —we may conclude that the mental contents corresponding to and respectively determining the two states are essentially the same. But if the correlation is of the same order as that given by two different individuals—*i.e.* of the order of  $+ .1$  or  $+ .2$ —we may conclude that the determining mental contents are different. To adopt the familiar, but valuable, analogy of the 'iceberg,' we should conclude in the first case that it is the same iceberg, but with a different area above the water and, in the second, that the iceberg has really been split into two parts.

As I have said, I anticipate that the former view would prove correct and this is to some extent supported by the work of Prince and Peterson in the "Sally Beauchamp" case described in the *Journal of Abnormal Psychology* for 1908.

These experimenters found that words which were emotionally signifi-

cant to the patient in one state evoked a large psycho-galvanic reflex when presented to her in another, in spite of the fact that when in the latter state she was amnesic to the experiences which, in her first state, invested the words with their significance. The experiments were however few in number and of a relatively rough-and-ready nature. That is to say no attempt was made to show the agreement between the two states *quantitatively* and, even if this had been done, there was in existence no standard of comparison by which the extent of the agreement could be assessed.

Unfortunately such clear-cut cases as this are rare, unless we include, as I think we should, those trance conditions commonly known as 'mediumistic.' These seem to me to deserve more attention from abnormal psychologists (and less from spiritualists) than they have yet received. To investigate such cases by the method described above would be very interesting and would almost certainly exhibit the trance 'controls'—to use the technical term—as no more than secondary personalities of the 'mediums' concerned.

It would also be exceedingly interesting to apply the method to hypnotic subjects. Hypnosis is now believed by many authorities to depend essentially on an affective attitude of mind on the part of the subject towards the physician and it is at least possible that this might show itself in the reactions given by subjects who have been frequently hypnotised when compared with those who have not.

It is also possible that the reactions of a subject under hypnosis would differ appreciably from those of the same subject in his normal state, and if this were so we might obtain interesting light on the mental condition of a hypnotised subject.

It would also be interesting to ascertain whether it would be possible to abolish or to enhance the affective tone normally evoked by a stimulus word by suggesting to the hypnotised subject that he should feel no emotion, or a great deal—as the case might be—when the word in question is called out.

Another point worth investigating would be the question of whether one could bring about any considerable redistribution of affective tone among the words of the list by suggesting to the subject that he is some person other than himself. It is well known that a hypnotised subject in a suitable condition will impersonate a suggested character with a fidelity and histrionic skill which are often remarkable. It would be interesting to ascertain whether such a suggested impersonation were accompanied by any radical redistribution of affective tone of anything



like the same order as would necessarily be observed if the real individual impersonated were substituted for the hypnotised subject. Personally I do not anticipate that any such wholesale redistribution would take place, but some appreciable change is at least possible and, in any event, the question of the extent to which 'affect' can be displaced and redistributed by suggestion is a very interesting one, the answer to which would considerably enlarge our understanding of mental mechanisms and processes.

The foregoing may be summarised as follows:

(i) Individuals show marked and characteristic differences in the reactions they give to a suitably selected list of words.

(ii) Provided the mean values of several tests are taken and that these tests do not extend over too long a period individuals correlate with themselves much more highly than they do with each other.

(iii) The most probable values of the correlations of individuals with themselves and with each other may be taken as approximately  $+ \cdot 65$  and  $+ \cdot 15$  respectively, for a list of words of the kind here used. More extensive investigations could, if necessary, enable us to fix these values precisely, to determine the corresponding frequency distributions and thus to render future problems dealt with on these lines amenable to strict mathematical treatment.

(iv) These facts should enable us to determine whether certain tracts of experience ever become completely split off from the principal mass, and whether mental conditions which appear at first sight to differ *toto coelo* from each other are in reality determined by identically the same aggregate of experiences of which different aspects are thus expressed, or whether they proceed from aggregates so discrete and so independent of one another as to warrant our describing the resultant states as genuinely different personalities. They may also throw considerable light on various questions concerning the permanence and liability to disturbance of the affective tone concomitant to the experiences of an individual mind.

## REVIEWS.

*The Psycho-Analytic Study of the Family.* By J. C. FLÜGEL, B.A. The International Psycho-Analytical Press, 1921. pp. x + 259. 10s. 6d. net.

In everyone who takes up the study of Psycho-Analysis strong resistance is at first invariably aroused by Freud's account of the part played by the Œdipus complex in the production of the psycho-neuroses and in determining throughout life the character and conduct of those who remain more or less free from neurotic disabilities. By some this resistance is never overcome and it serves as an effective barrier against any true understanding of psycho-analytic teaching. On the other hand no one who has occasion to enter upon the active *practice* of psycho-analysis can fail to be impressed by the evidence afforded of the importance of the affective relations subsisting between the patient and the various members of his family. But having thus verified the truth of some part of Freud's teaching and become therefore more ready to believe that other parts which he has not yet verified may also be true, the student finds himself confronted with a whole system of beliefs which may come into violent conflict with all he has hitherto held most dear.

In no direction is this opposition between traditional ideals and the findings of psycho-analysis more marked and insistent than in that towards which we have to turn in the psycho-analytic study of the family; and although many of the conclusions to be derived from such study have already been given expression to in the works of Freud and of other psycho-analysts, the time is ripe for bringing them together and dealing with them systematically as Mr Flügel has done in this book. It is true that the results of recent research are still largely a matter of controversy, and it is not to be expected that any finality of view can be attained at the present time; but the practical importance of the conclusions already arrived at—some of them supported by evidence drawn from many different sources—justifies the attempt to show the bearings which these conclusions have on the actual conduct of social and family life.

For the most part this book aims at being a work of compilation and the author thinks it necessary to warn the reader that, except in the last few chapters, he will find nothing here that has not already found a place in the literature dealing with the subject. On the whole this is perhaps true, but we think Mr Flügel is too modest in his estimation of the value of his own contributions and of the usefulness of the book as a whole, not only to the psychologist but to "the sociologist, the moralist, the spiritual adviser, the teacher, the family physician and the parent."

In the order of presentation adopted the primitive emotions in relation to the family and the origin of the conflict arising out of them are first set forth. Then follows an interesting chapter on "The Family and the Life Task of the Individual," in which full credit is given to Jung's views, although there is also some cogent criticism of this writer's denial of "all ultimate significance to the sexual aspects of the family complexes." Mr Flügel's own view is that the sexual aspects of the ideas connected with the Œdipus complex "possess more than a mere symbolic significance—that they must in fact be looked upon

as, for the most part, actually being that which they appear to be, *i.e.* manifestations of (relatively) infantile tendencies which, as regards their nature and origin, are continuous with, and comparable to, the fully developed sexual tendencies of adult life."

He makes, however, a distinction between the 'sexual' and the 'dependence' aspects of the family relationship, although he admits that in actual life these are inextricably interwoven. Normal development entails emergence from parental authority and care and the attainment of autonomy in judgment and conduct. Development in these respects seems as difficult as in the case of the sexual tendencies, and, when obstacles and difficulties are encountered, is liable to arrest, retardation and regression to earlier stages, just as in the case of *libido* development.

The abnormalities and varieties of development in respect of the love and hate elements of the Œdipus complex and the influence of the fixation of these on the growth of the dependence aspects are well described. An outline of "The Psychology of Initiation and Initiation Rites" is followed by two interesting chapters on "The Development of Parent Substitutes" and "Family Influences in the Development of the Love Life." In the latter chapter Freud's division of loves into two types—the narcissistic type and the dependence type—is adopted and an instructive account of the implications of this division is given. Noteworthy also is the detailed consideration of the factors tending towards the production of dissociation of purely sexual attraction from tenderness, esteem and the other components of fully developed love.

Problems of great sociological importance are discussed in Chapter XII on "Family Influences in Social Development." The displacement of mother-regarding and father-regarding tendencies on to the state is illustrated by the different attitudes towards their native land shown by Englishmen and Germans, for example, and this difference suggests to Mr Flügel "the existence of a fairly close correspondence on the one hand between the maternal view of the state and the development of democratic institutions and individual independence, and on the other hand between the paternal view and the development and retention of autocracy and a relatively strict subordination of the individual to the authority of the government and of its representatives" (p. 128).

When the attitude towards the state is not one of love but one of hate and rebellion, hostility towards the parent is held to play the leading part in the unconscious motivation of malcontents and revolutionaries. It is for this reason, Mr Flügel says, that revolutions in autocratic paternal states are usually more violent and extreme than in the case of freer and more liberal maternal countries—"since the desire for rebellion in early family life is generally directed against the authority of the father to a much greater extent than against that of the mother." But rebellion against the mother is a common feature in the family life of the female half of the population, and, if Mr Flügel's view is correct, it is interesting to speculate on the probable effect on future revolutions of the recent accession of women to political power.

The descriptive portion of the book concludes with chapters on "Family Influences in Religion" and "The Attitude of Parents to Children." This latter chapter is one of the most useful and valuable of the whole book, for, as Mr Flügel says, "The avoidance of the evils consequent upon the insufficient readjustment of the parents' attitude towards their children is one of the most pressing tasks of an enlightened hygiene of family life."

In the more theoretical portion of his book Mr Flügel attempts to establish

some connections between the psychological data and the related facts of anthropology and biology. The origin and development of the love and hate aspects of the family tendencies are dealt with in some detail; but since the hate tendencies arise very largely from thwartings of the love tendencies, the latter are fundamentally the more important and receive from the author the more searching examination.

From the standpoint of psycho-analysis the love aspects of the family tendencies centre in the problem of incestuous affection, and Mr Flügel discusses this problem, asking (1) What are the influences which bring about this attachment in the human mind, and (2) what are the further influences which have brought about its repression?

Very full consideration is given to all the factors which may have been operative in producing and maintaining the tendency to incest; but in view of the universal occurrence of this tendency and of its great strength even after ages of repression, Mr Flügel is tempted to regard it as an innate factor in man's mental constitution. Indeed he supposes that at one time this tendency may have been of advantage in the struggle for existence and that its persistence to-day may be due to a consolidation of hereditary dispositions effected by natural selection.

When he comes to consider the question of the repression of incestuous love Mr Flügel finds, as was not the case in his discussion of the positive aspects of the tendency, that certain explanations have already been advanced by other writers; but these he considers for the most part unsatisfactory or at least incomplete. He passes in review the explanations of exogamy given by primitive peoples themselves and by such writers as Durkheim, Westermarck, Wundt, McLennan, Herbert Spencer and others; and although he admits that the factors suggested by these authorities may have played some part in bringing about the practice of exogamy, he thinks there is pretty general agreement that none of them affords a complete or sufficient account of this phase of racial development.

In pointing out the "biological absurdity" of parent-child incest (p. 207) Mr Flügel raises some doubts in our minds concerning his suggestion, referred to above, that the tendency to incest is perhaps innate and was at one time fostered by natural selection. For now he describes the dysgenic effects on the offspring which result from cohabitation between individuals of widely different ages, and the disadvantages which would accrue to any races in which parent-child unions were common. Natural selection would act adversely to the inheritance of such tendencies; and although this objection would not apply to brother-sister unions, yet these are admittedly not the most primitive form of incest, and, on Mr Flügel's own showing, it is therefore difficult to see how natural selection in our *human* ancestors can account for the universal presence of the incestuous tendencies revealed in the (Edipus complex. Their innateness, if they are innate, must be traced to an earlier phase of phyletic history.

On the other hand there is every reason to believe that the tendency to the repression of incest is innate in man, and, as Mr Flügel well shows, such repression would have survival value in primitive peoples and would thus allow natural selection to come into play in forming and consolidating the hereditary dispositions which ensure the repression of the (Edipus complex. For as he points out, strong family ties conflict with individual and social development and natural selection would "ensure the continuation of those communities in which the incest tendencies were more repressed" (p. 211).



The book concludes with two valuable chapters on the "Ethical and Practical Application" of the knowledge to be derived from the psycho-analytic study of the family. The two chief tasks revealed by this study are (1) "the weaning of the child from the incestuous love which binds it to the family (together with the secondary hatred which this love may entail), and (2) the gradual loosening of the psychological, moral and economic dependence of the individual on the family."

Considerations of space forbid us to enter into any detailed examination of the many important contributions which Mr Flügel has made to the matters discussed in this book; we can only recommend their careful study to everyone who is interested in the psychological and sociological problems of to-day.

T. W. MITCHELL.

*Psychoanalysis in the Classroom.* By GEORGE H. GREEN. London: University of London Press, Ltd., 1921. pp. viii + 276. 7s. 6d. net.

The writer of this little volume has endeavoured to "present as clearly and as simply as possible, such parts of the psychoanalytic theory as were likely to be of use to parents and teachers." He has succeeded admirably.

The title is perhaps open to some small objection. "Psychoanalysis" is less euphonious than the more generally accepted term; and, further, Mr Green does not for a moment desire, as his title might suggest, that the teacher himself should carry out psycho-analysis upon the pupils in his classroom: he merely feels that an appreciation of recent psycho-analytic doctrines will assist the teacher to understand the nature, or at least to recognise the existence, of many of the commoner problems which the classroom presents.

His exposition starts from the daydream. In so doing he abandons the order followed by most writers, who begin, as a rule, with nocturnal dreams, or with myths and the symptoms of hysterical delusions. Instead, he chooses an approach which is far more familiar, far more intelligible, and far more acceptable, to the lay reader. From the daydream, which he analyses at considerable length, he turns to discuss the nature of play, which is itself to a large extent an acted daydream, just as the daydream is a passive form of imaginative play. Only after these simpler topics does he advance to an exposition of the process of nocturnal dreaming. It is, perhaps, to be regretted that he nowhere attempts to summarise the more important of the recognised mechanisms that underlie the processes of dream-formation; for an understanding of these mechanisms would throw a flood of light upon the allied activities of fantasy and play, and upon classroom problems generally.

A couple of chapters follow upon "word-associations" and on "interest," leading up to the doctrine of "libido," which is conceived, apparently, as a sort of general fund of mental energy, a fundamental conative impulse which becomes specialised into the several hereditary instincts. The three processes of introversion, extroversion, and identification, are then discussed in as many chapters, rather from the standpoint of Jung; and the psychopathology of everyday life is then expounded from the familiar standpoint of Freud. The book closes with a cautious chapter upon "dependence and sex."

A bibliography is appended. Tridon's *Psychoanalysis* is described, with an excess of generosity, as "the best single volume available for the reader who

is not acquainted with the technical side"—a commendation that would be more worthily attached to Mr Green's own chapters. Dr Tansley's *New Psychology*, however, and Professor Nunn's *Education: Its Data and First Principles* are omitted from his list: they would provide the teacher with a far sounder approach to the problems Mr Green has in mind. But, for the most part, both the selection, and summaries of the several books selected (which would have gained by an indication of their size and price) are trustworthy, and likely to be most helpful to beginners.

Throughout Mr Green has written in a clear and interesting manner; and the more important points are well illustrated by the analysis, or at least the description, of some fourteen representative cases. I know of no other introduction to psycho-analysis, equally simple in its approach, equally popular in style, and equally cheap in cost, which can be so safely recommended not only to the teacher or student of education, but also to the school medical officer who has at times to deal with problems of child character and of the classroom. The doctrines of the two schools of Zürich and of Vienna are absorbed into the discussion with almost complete impartiality. The author acknowledges the personal assistance of Oxford psychologists—Professor McDougall, Dr Keatinge, and Dr Marett; and their views have plainly influenced his general attitude. If his treatment is a little lacking in profundity, in originality, and in systematic thoroughness, this, as the author explains, is due to a deliberate limitation in his initial purpose.

CYRIL BURT.

*The Education of Behaviour: A Psychological Study.* By I. B. SAXBY, D.Sc.  
London: The University of London Press, Ltd., 1921. pp. viii + 248.  
6s. net.

This book is a lucid and readable attempt to describe for teachers and parents the modern views upon the psychology of character, and to deduce from those views a body of practical precepts for character-training. The basis of the general exposition is McDougall's doctrine of human instincts, as set forth in his *Social Psychology*; but the writer also incorporates into her pages a good deal of other recent and experimental work.

One or two minor points call perhaps for a little criticism. Dr Saxby is writing primarily "for those who are in charge of boys or girls during adolescence," by which period she seems to understand the ages between nine and seventeen. But of the peculiar difficulties of adolescence, as commonly recognised, she says little or nothing; and the bibliography does not even include Stanley Hall's classical work upon the subject. There is, it is true, a brief section upon the sex instinct; or, as the writer prefers to name it, the "impulse to seek a mate." But her account consists chiefly of cautious platitudes about the microscopic amoeba and the duty of sex-enlightenment.

It is claimed in the publishers' announcement that "the author includes psychanalysis in a very effective way, especially in its direct application to the everyday work of education." The book, however, makes practically no attempt to give a full and systematic account of the characteristic psycho-analytic doctrines; and the summary of the views of Freud and Jung is limited to three or four pages each on "repressed complexes," on "mind tunnelling by free association," and on "hero-worship."

In its general character the book is somewhat uneven. But it represents a sincere endeavour to carry out a useful and much needed piece of work. The analytic summaries at the head of each chapter will be especially helpful to the student: and the bibliography at the close (which, with the index, curiously enough omits all reference to Stout) should be of service to those who wish to fill in the outlines which Miss Saxby has so clearly sketched.

CYRIL BURT.

*The Psychology of Everyday Life.* By JAMES DREVER, M.A., B.Sc., D.Phil., Combe Lecturer in Psychology in the University of Edinburgh. London: Methuen & Co., 1921. pp. ix + 164. 6s. net.

The avowed object of the author is to satisfy the reasonable desire of the ordinary educated man for a closer acquaintance with the science of modern psychology. He claims that "the topics which have been selected for treatment represent at one and the same time the essential elements of the science and those sections of it more particularly which have a close relation to practical life, and which in recent times have come prominently into notice in connexion with various developments in medicine, education and industry." The "modern" psychology of the author is not the "new" psychology of the psycho-analyst, but includes it. He "has striven to preserve a due balance of treatment in the science as a whole, and, taking the longer view, is convinced that psychology is far wider than the theory of Freud or Jung, and that those psychologists themselves would be the first to acknowledge the fact" (vi).

After two introductory chapters, starting from the position that "man is primarily a doer rather than a knower" (19), he shows that the "urge" or "drive" of instinct, with its accompanying emotion, will account for much of the activity of mankind, by treatment of that portion of psychology which is most akin to biology: appetites and instincts; emotion, mood and sentiment; social interaction—imitation, sympathy and suggestion; play, relaxation and mirth; defence mechanisms—self sophistication, compensation, protective camouflage and forgetting. This brings us to the centre of the book and is followed by four chapters dealing with the work of the older "new" psychology, in which the methods and apparatus of the physicist have been applied to the study of sensation, perception and memory. "Jung's association method" and "Freud's psycho-analysis" are dealt with briefly in the chapter on memory and forgetting. The author agrees that forgetting is often due to submerged complexes but is not prepared to accept the Freudian theory as to the nature of these complexes; and, in contradiction to the extreme Freudian position that "all forgetting is repression," holds that "As causes of forgetfulness we have these three, selection and interference, which operate partly through inhibition and dissociation, and obliviscence, the result of lapse of time" (117).

We have then a short chapter on imagining and thinking, "devoted largely to defining and distinguishing," and only one page of which deals with thought. Dr Drever recognises that in these processes we are dealing with "higher mental levels" (123), and concludes his short treatment of thinking with the words: "The thinking of relations thus enables us to have that kind of experience called a concept, and to go on to deal with concepts, independently of the particular and the concrete, to go on, it may be, to the discovery of laws and

principles which are universal. This development of mind seems to be reached by the human being alone to any significant extent" (131). That the author can spare no more than ten pages for "mental elements that are characteristic of the higher mental levels" that are "reached by the human being alone" would seem to indicate that, in an attempt to escape the errors of a too intellectual psychology, he has swung to the opposite extreme. We look in vain for any treatment of reason, judgment, knowledge, belief or volition; while the treatment of character, to be found in the first part of the book, is hopelessly inadequate. As Ward, paraphrasing Kant, writes: "Character is not a question of what nature (his talent and temperament) makes of the man, but of what the man makes of himself. Talent may give him a market-value in respect of the services he can render; temperament may give him an affection-value as a congenial and pleasant comrade; but character gives him (or may give him) an inner worth that is beyond all price<sup>1</sup>."

The book concludes with two chapters on abnormal psychology containing accounts of illusion, delusion, hallucination, dreams, crystal vision, automatic writing, and multiple personality. The last three are termed "spiritistic phenomena" and are used to bolster up a tilt at psychical research and those scientists who have been associated with it. The author's dislike of "psychical research in its spiritistic guise" (2) looms large in the book. We meet it in the introduction; in the chapter on perception, after a discussion of "the conjuror's success" and reference to experimental demonstration of the unreliability of evidence, we read: "In the light of such demonstrations, the evidence of the great majority of the witnesses of spiritistic manifestations, however honest and sincere they may be, must be regarded as utterly worthless" (79); the book concludes with the words: "He would be a bold man who would attempt to define the limits of the possible, but the limits of the probable are easily determined by any intelligent man who is willing to acquaint himself with the relevant evidence, and to consider that evidence without personal bias or prejudice"; while a little earlier we are informed: "The psychologist claims that, if he has not solved all the problems, he is at least in a fair way towards solution" (152). Need it be said that this extreme view is not the reasoned finding of psychology? Scarcely, we think, when Professor McDougall (whom the author places first in the list of psychologists to whom he "would acknowledge particular indebtedness") (vii), in his *Home University* volume on Psychology, gives F. W. H. Myers' *Human Personality and its Survival of Bodily Death* and Sir W. F. Barrett's *Psychical Research* in the list of six books on the abnormal included in the bibliography for the general reader.

This attitude towards psychical research would seem to be bound up with the author's attitude towards the question of the reality of mind. "The science which studies the mind...is not a satisfactory description of the province of psychology" (2) because "mind is not an observed fact" (3). Nevertheless the writer is not a thorough-going behaviourist: he does not finally discard mind. We find memory described as a "definite change in the structure of the nervous system, and of the mind" (16), and dissociation as "a definite blocking of...connecting paths in the nervous system—and in the mind" (35). Still in each case the inclusion of mind appears to be due to an afterthought and in no way essential to the argument. When we seek the author's meaning of mind we find the following: "Further, experience, regarded as a phase in

<sup>1</sup> *Psychological Principles*, p. 461.



reaction to an environment, is a quite unique product of the life forces of the organism on the one side and the nature of the environment on the other.... It is a compound product, or a synthetic product, to use chemical terminology, but a compound in which the life forces and the external environment take on the new character of mind" (13). From which it would seem that for the author, either, mind is epiphenomenal, or, experience *is* mind, even as James argued "the thoughts themselves are the thinkers."

Lip service is given to introspection: "Introspection must be regarded as the final court of appeal in psychology" (7): "the science which studies behaviour will not be psychology except in so far as it regards behaviour as in some way the outcome of mental or psychical process" (3). The substitution of 'mental process' for 'mind' would seem to betoken a compromise, for while mind is rejected as not an observed fact, an attempt is made to find some place for "mental and psychical facts" in a definition of psychology. It is suggested that the definitions of the introspectionist and behaviourist schools of thought must be combined to secure a satisfactory definition. "The truth is psychology studies the two groups of related facts, the facts of experience and the facts of behaviour. The objective happenings are those activities which constitute the behaviour of a living organism, but those objective happenings are interpreted in the light of that inside knowledge of the underlying mental processes or happenings, which each individual has direct access to in his own experience" (3). This would seem to indicate that the fundamental methods of psychology necessarily involve the "psychologist's fallacy" and will satisfy neither party in the dispute. The position is readily demolished by the thorough-going behaviourist. He has no need to interpret behaviour in terms of experience. He assumes ability to use intelligence and reason, and these suffice for the building up of suitable hypotheses in explanation of his "observed facts." In common with workers in other sciences he is not concerned with introspection. On the other hand the introspectionist will declare that the object of his introspection is not primarily the interpretation of behaviour, but the observation of his own mental processes, in order that he may compare them with similar observations of others and seek, by that same use of the intelligence and reason on which the behaviourist and others rely, to evolve hypotheses explanatory of mental phenomena.

The given reason for rejecting mind from a definition of psychology is that "mind is not an observed fact." We are then at once faced with the question—What is an observed fact? Is 'mind' in any worse position than 'light' or 'electricity'; or is the existence of 'matter,' the fundamental assumption in the science of chemistry, any more a demonstrable fact than the existence of 'mind,' the fundamental assumption of the 'old' psychology? The final word in the battle between realist and idealist has yet to be written. Without awaiting it, on the assumption of the reality of matter, other sciences, "daughters of philosophy and elder sisters of psychology" (2), have built up much valuable knowledge. Possibly psychology, as a science, must similarly make an initial assumption of the reality of mind, believing that mind is for the psychologist what matter is for the chemist. Two other possibilities seem open. We may class 'mind' with 'sound,' 'light,' 'heat,' 'magnetism' and 'electricity,' believing that finally it will be explained in terms of matter and motion, or, we may hand 'mind' back to philosophy, as for science, a useless concept. The first of these positions would seem to be that of the behaviourist: the second that of our author.

We freely acknowledge the great value of the work of the behaviourist and quasi-behaviourist, but their activities are so engrossing that they have little or no time for the psychology which has absorbed much of the time of many of the world's greatest thinkers and must perforce leave untouched an important part of the field of psychology: the "higher mental levels" which can be studied in man only and apparently by no other means than introspection and the comparison of records of introspection. In discussing the formation of character, Ward writes: "Whereas the mere animal practically begins and ends with the stability of its instincts— is from first to last confined to the level of its species—man only gradually achieves personal stability in passing from that level through the instability of the imagining and desiring self of childhood to the steadfastness of a reasonable and autonomous being. But it is notorious that there are many who never, completely and all round, develop beyond the larval stage, are never altogether 'grown up'; but in one respect or in many behave like children all their days. Ribot calls such people *les instables ou polymorphes*; he even regards them as more or less morbid cases of arrested development or *infantilisme psychologique*¹." Modern psychology, on the showing of our author, would seem to be the psychology of the instinctive levels and of the imagining and desiring self of the child and polymorph. He has done good work in showing the "new" psychology as but a section of "modern" psychology. It remains for "modern" psychology to realise that it, also, is a part, not the whole.

R. J. BARTLETT.

*The Psychology of Industry.* By JAMES DREYER, M.A., B.Sc., D.Phil., Combe Lecturer in Psychology in the University of Edinburgh. London: Methuen & Co., 1921. pp. xi + 148. 5s. net.

The author has written "not so much for the student of psychology as for the ordinary man" (p. v) a concise and interesting summary of the application of experimental psychology to industry, from which may be gathered both the value and limitations of "the applied psychology of industry" (p. 127). Case after case is quoted where output has been more than doubled while the quality of work has improved; but an antagonistic attitude of the workman will more than neutralise the best work of the "new profession... of 'psychologist'" (p. 40). "Gilbreth's well-known bricklaying experiment" proved that it was readily possible "to lay 350 bricks per hour, in place of the 120 which represented the normal hour's work on the old method. In this country [Scotland] the present *day's* work of the bricklayer is 300 bricks!" (p. 81). The industrial psychologist had ideal conditions under which to work during the war, for then "the spirit in many factories was the spirit of the football field" (p. 52), but apart from that time, when a common cause banded all together to increase efficiency as much as possible "there has hitherto been a tendency on the part of the worker to regard the intervention of the psychologist with suspicion" (p. 41).

"Psychological problems of the economic life arrange themselves in three well-marked groups: (1) Problems of the worker—his character, intelligence, vocational fitness and the like; (2) Problems of the work, and the factors upon

¹ *Op. cit.* pp. 464-5.

which its efficiency depends, such as fatigue, length of work and rest periods, economy of movement, conditions of working, and the like; (3) Problems of the market" (p. 8). Under (1) are described intelligence and vocational tests (chs. II, III), under (2) laboratory experiments on work and fatigue, analysis of the work curve and application of the results to industrial conditions with the object of improving both output and quality of work (chs. V-IX), while under (3) are considered advertisement, display and salesmanship (chs. X, XI).

In the field of work, and to some extent in vocational tests also, it is difficult to separate the work of psychologist from that of physiologist. The "oft quoted" vocational test for bicycle ball examiners (p. 38) secures the reaction time for a visual stimulus by methods well within the realm of physiology.

The author also finds it necessary, and not particularly easy, to discriminate between industrial psychology and economics. He writes: "Marshall defines economics as 'a study of man's actions in the ordinary business of life.' This is curious and interesting, because it is precisely how a behaviourist might define human psychology, and the fact would seem to indicate how closely the two sciences may come to each other when we consider the relation of both to ordinary life" (p. 6). He considers the difference between them is "that economics is really an abstract science" whilst psychology studies "the concrete activities of the concrete individuals": economics is concerned with the average man, psychology with individual men. He refers to Ruskin's attacks on economics. Maybe the industrial psychologist, too, has need to remember that man appears to be more than a machine. It is noticeable that the first of the "problems of the worker" recognised by the author, *character*, is passed over with a casual reference, while the other factors, intelligence and vocational fitness, are given a chapter each.

"Industrial psychology" must be distinguished from "scientific management" (p. 9). "Psychology must not be made in any way responsible for some of that 'speeding up' and over-driving in industry, which various scientific management engineers have falsely attributed to psychology" (p. 50). Unfortunately, however, unscrupulous management, in normal times, may attempt to turn, solely to its own profit and that of capital, possibilities of labour revealed by the psychologist when called in, at an abnormal time, to assist in accomplishing abnormal tasks. It is this that labour fears and feels it must resist. Again, apart from the fear of unfair treatment, there are questions that arise directly from the nature of the results obtained by the psychologist. "Where 140 men can do the work formerly requiring 500, what is to happen to the other 360?" (p. 75). Labour fears increased efficiency in the human machine just as it feared, and to some extent still fears, the introduction of machinery, believing that increased efficiency must be accompanied by an increase in the number of unemployed. "You must convince the worker that he individually will not be the loser, and the trade union that its solidarity will not be imperilled" (p. 76). A psychology that deals with man primarily as a 'doer,' rather than as a 'thinker' and 'believer,' can do little to produce that desirable conviction.

While, however, the author is concerned primarily with the application of the older 'new' psychology to industry he seems uneasy in his self-imposed shackles and from time to time takes the broader outlook of an older psychology. "The worker's belief" (p. 52) obtrudes itself from time to time; the influence of "an effort of will" (p. 64) is recognised in the work problem, while

"the will to buy" (p. 110) is the crux of the difficulty in the discussion of problems of the market, and plays such tricks with applied psychology that the author is constrained to write: "A knowledge of general human psychology is probably even more important in business than a knowledge of the applied psychology of salesmanship and advertising" (p. 105); and again: "The psychology of salesmanship is in fact very largely a direct application of the principles of general psychology, not a highly specialised branch like industrial psychology" (p. 125). It would seem that the industrial psychologist, as many another industrial scientist, is but a tool in the hands of a controlling management that knows what it wants and wills to secure it. Among the leaders in that controlling management are men, brought up on classics and the humanities, who know little of science but much of human nature, and who, maybe as pastime, have read and enjoyed Ward's *Encyclopaedia Britannica* article on Psychology, absorbing therefrom some of those principles of general psychology that our author agrees are so valuable in the management of men. It is the old story of the 'doer' doing the will of the 'knower.'

In the introduction and conclusion we find material for a preliminary classification of the branches of psychology. "The real new psychology" is an *applied* psychology having at present at least three clearly differentiated sections: applied psychology of medicine, applied psychology of industry and applied psychology of education (p. 127). Applied science presupposes a 'pure' science and accordingly in addition to, or possibly including, the 'general psychology' already referred to we are, in passing, introduced to a "Pure psychology [that] seeks to understand...behaviour...by understanding...mental processes" (p. 5). To secure a satisfactory definition of this pure psychology is apparently an aim of the author. The attempt made, in *The Psychology of Everyday Life*, to combine the 'old' and 'new' definitions is carried a step further. The definition now put forward to replace the 'old' definition—"The science of the mind or soul"—is: "The science of the facts of human nature and human behaviour" (p. 4). Remembering that elsewhere the author has written: "science, if it has done nothing else, has at least made us critical of definitions<sup>1</sup>," we would criticise. The inclusion of the word 'facts' in the definition of a science would seem to be an innovation, of doubtful value, challenging the question—What are 'facts'? Again—What is 'human nature'? In what respects is it superior to 'mind' in a definition of psychology? And lastly, we are greatly surprised that our author, whose best known work in psychology is work on instinct, should restrict the province of psychology by inserting the word 'human.'

R. J. BARTLETT

*Symptomatology, Psychognosis, and Diagnosis of Psychopathic Diseases.* By BORIS SIDIS, A.M., Ph.D., M.D. Edinburgh: E. & S. Livingstone, 1921. pp. xix + 448. 21s.

This is apparently the reproduction of a work published originally some years ago in America. The name of Boris Sidis is well known in connection with hypnoidal states and the method of mental exploration which he calls psychognosis, and when he describes this we recognise the writing of a practised

<sup>1</sup> *Psychology of Everyday Life*, p. 2.



clinician; but the rest of the book presents an embarrassing wealth of material that cries aloud for criticism. In his introduction he lays down that

"the phenomena of abnormal mental life do not present any purpose in the present; they are repetitions, recurrences of a past, but they have no aim, no purpose, no meaning in the present life existence of the patient. In fact, the symptoms are pathological, just because they have no purpose, no meaning in the life of the patient" (p. viii).

Dr Sidis evidently attaches value to literary repetition, but the memory of these phrases raises wonder why

"we must learn to know the working of the patient's mind, we must learn his ideals of life, his attitude towards man and the world, his actions and his total reactions in his adaptations to his environment" (p. xviii).

One suspects that his antagonism towards certain views often leads the author to express opinions which, like those first quoted, are not consistent with his own practice. Psycho-analysis he attacks by the method of vituperation and, after concluding that "Psycho-analysis is sheer humbug," he modestly says of Psychognosis:

"All I wish to convey by it is what the term means, namely a study, an acquisition of a working knowledge of the patient's soul, so to say" (p. xvii).

A fourth part of the book is devoted to illusions and hallucinations, and four and a half pages suffice for the consideration of "fixed ideas, morbid impulses, and emotions"; this is a badly balanced distribution. A chapter on delusions opens with the thought-provoking remark that "delusions do not belong to the domain of functional psychology." Such bald statements abound, but are sometimes more intelligible than this one; in fact, they are often primitive in their simplicity. Simple is his classification of nervous and mental diseases: first come *organopathies* or *necropathies*, in which there is a pathological modification of the nerve cell ending in the death of the neuron; these include general paresis and dementia precox. Then come *neuropathies*,

"in which the neuron undergoes degenerative changes which at first bring about an apparent increase and then a suspension of function not necessarily terminating in the death of the neuron.... Here belong all the temporary maniacal, melancholic and delusional states... and, in general, all the mental states known at present under the description of manic-depressive insanity" (p. 97).

These states may or may not be due to degenerative changes in the neuron, but the unsuspecting reader would believe that such changes are commonplace of pathological anatomy instead of a matter of speculation.

The pathology of what are commonly known as 'functional nervous disorders' is equally simple. In these, which he calls *psychopathies*,

"the neuron itself may remain healthy, the trouble being due to associations with systems of neurons which are usually not called into action by the function of that particular neuron or system of neurons" (p. 98).

A little further on we find reference to hysterical disturbances of various organs

"over the functions of which the personal consciousness is found on examination to have lost control by reason of neuron disaggregation and dissociation" (p. 100).

The method of examination leading to such a discovery ought to be definitely described, for the result obtained should throw a great light upon the age-long problem of the relation of brain and mind. And it all seems so simple.

Unfortunately the simplicity is not maintained. In a chapter on the aphasias he talks of "a lesion of the temporo-sphenoidal convolution" causing *auditory apraxia* (p. 251); then the next paragraph begins "Systems of tactual presentations may similarly become disaggregated" and he goes on to talk about—one cannot say 'describe'—other disaggregations causing *alexia*, *apraxia*, etc. On p. 255 he returns to "a lesion of such extent as to prevent the associative activity of all the special sense areas," and finishes the chapter with—

"The forms of reviewed aphasias may be of an organic nature, or of a functional psychopathic character which may closely simulate organic conditions."

He leaves out the question of differential diagnosis, and is certainly wise not to try to extricate himself or his readers from this tangle of highly speculative 'neuron disaggregation' and observed pathological facts. 'Neuron disaggregation' is a plain statement of supposed fact that has, however, no basis in actual observation and only confuses discussion. If it had the slightest use in helping us to understand cases, or in helping the author to describe them, one might endure it for its pragmatic value; but when the author comes to describe clinical work all this speculation is discarded and we hear no more about neurons or their disaggregation.

A similar objection applies to the classification of the energy of the neuron as dynamic, static, reserve and organic; it is a presumption that leads nowhere, except to the production of a diagram that has served the reviewer to while away some of his Christmas holiday in an unsuccessful attempt to understand it. The five-page chapter on "The Diagnosis of Psychopathic States" provides a sort of 'find the missing picture' puzzle. Under this caption we expect to find information of clinical value in diagnosis, but expect in vain. We try to imagine some possible condition to which the wordy descriptions can apply, for example:

"Another important characteristic is the *periodicity* of remissions in the appearance of the morbid system. The attacks of functioning of the dissociated morbid system run in cycles. During the attack the mind works in a circle. This is an important pathognomonic symptom of psychopathic affected: *cyclical* and *circular* mental movements" (p. 391).

We are given no hint as to the clinical nature of the 'morbid system,' or of the 'attacks,' and as the 'psychopathic affected' gives us a range over all the functional nervous disorders the value of the 'pathognomonic symptom' lies chiefly in its power of provoking curiosity. Does Dr Sidis here refer to hysterical seizures, to the exacerbations that sometimes recur in anxiety states, or to those 'nervous breakdowns' that occur several times in the course of years and prove to be exaggerations of an obsessional neurosis?

Dr Sidis has many selves: one of them says (p. 269):

"Nothing so much impresses itself upon the mind and is remembered so lastingly as some extremely painful experience... Experiments performed on the oblivescence of the painful tend to prove that it is the painful that remains for a long time specially vivid in consciousness."

Another, his psychognostic self, writes chapters describing the process of restoring to consciousness unpleasant and horrible memories, and, having thus disposed of the beliefs of the first self, declares:

"Unless this nucleus of the set of subconscious symptoms is reached and disintegrated the patient cannot be regarded as cured" (p. 380).

To this another self counters:

"Many psychopathic cases have been treated by me and cured *permanently* [author's italics] by hypnosis alone" (p. 70).

Yet there is no apparent result of conflict; Dr Sidis has no doubts; what he believes is final; and one pictures in him, as a natural gift, that cheery and confident manner which medical text-books tell us is so important in the successful psychotherapist. The Great War and the hand of Time have dealt lightly with his views, and what he wrote in 1914 he reproduces unchanged in 1921.

It must not be thought that the author is incapable of making sound observations. His work on hypnosis has practical value for those who use the method either for suggestion or mental exploration, and he was, after Freud and Breuer, a leader in demonstrating the clinical utility of exploring hidden memories. The chapter on "Somopsychosis and Psychoneurosis" shows that he has independently arrived at the distinction between the extrovert and the introvert. But he loses himself in a maze of repetition and inconsistency, and of speculation which poses as fact; these faults overpower the value of the actual observations recorded in the book.

MILLAIS CULPIN.

*Therapeutic Immunization in Asylum and General Practice.* By W. FORD ROBERTSON, M.D., Pathologist to the Scottish Asylums. Edinburgh: E. & S. Livingstone, 1921. pp. vii + 278.

Co-operation between the clinical psychologist on the one hand and the physiologist and pathologist on the other is essential to progress in the working out of the problems of nervous and mental disease. It is true that the development of histological methods in the last century raised false hopes of finding in the cells of nerve tissue the cause of all mental disorders; of a disease such as paranoia, for example, histology has taught us no more than it has, let us say, of the formation of political opinions or a dislike for tomatoes. But laboratory work has found a new field of research into the bodily accompaniments of emotion, and the close connection between the endocrine glands and emotional disturbance is proving of more than theoretical value, even if we are as yet unable to reach agreement as to what is cause and what effect.

We could possibly arrange the 'functional nervous disorders' in a series, at one end of which would appear those obsessional neuroses almost or entirely lacking in bodily disturbance—that is to say, purely mental in origin and symptomatology, and at the other end certain physical disturbances, digestive, respiratory or circulatory, in which there is a combination of toxic and mental causes.

In the study of such a combination the medical psychologist has an initial advantage, not of his own seeking, and one which he would rejoice to see equalised. He has had perforce to acquire a minimal knowledge of physiology and pathology and has at least a speaking acquaintance with the subjects of bacteriology and vaccine therapy; his knowledge of psychology and, to a great extent, of psychoneurotic disorders he has acquired outside his student curriculum. In no other speciality is the student at such a disadvantage, and although these disorders will form a fair proportion of the cases that the

practitioner will meet yet his knowledge of them frequently consists in the assumption that they consist of two diseases, hysteria and neurasthenia, the first being something akin to malingering, to be treated with moral advice and firmness, whilst the second is to be handled by hunting for some bodily disease which his one-sided training will allow him to treat. Of anxiety states and obsessional neuroses he has scarcely heard, and it is common enough to meet sufferers from these conditions who have been under lengthy treatment without their real symptoms ever being investigated.

As a result of this gap in medical education we find that clinical observations on the treatment of 'neurasthenia,' though of possible importance, are often valueless. According to recent publications neurasthenia has been cured by treating flat-foot or dilated stomach, or by excluding white bread from the diet, and we are familiar with the influence ascribed to errors of refraction and pyorrhoea, and the benefit derived from treating them. Unfortunately, we are left in ignorance of what the neurasthenia is—whether a state of fatigue, of anxiety, obsessions or what-not—and the clinical value of the reports is equal to reports of the cure of so many cases of 'fever.'

We might consider why 'neurasthenia,' which in the loose meaning of the word comprises so many cases the obstinate and persistent nature of which impresses the psychotherapist, should be the subject of claims to cure by the most diverse methods. Its variable nature in the individual case allows of amelioration by any treatment that provides relief from irritation or toxic influence, and the transitory nature of the amelioration may be overlooked, but the chief pitfall is probably to be found in the replacement of one symptom by another. An anxiety state is sometimes completely replaced by a definite physical symptom; or one symptom may be replaced by another of unrecognized psychical origin, as when headache with 'lack of concentration' is relieved by glasses and followed by 'gastritis,' the underlying condition, whatever it may be, remaining unrecognized. One sees patients in whom several organs have received attention, the result of treatment being satisfactory, but some new affection occurring as each one is 'cured'; these cases are examples of the cure of 'neurasthenic' conditions.

In Dr Ford Robertson's work we look for that co-operation with his psychological fellow-workers for which his position offers every advantage. Seeking for evidence of his being in touch with present-day views we read (p. 218) "The distinctive signs and symptoms of neurasthenia are capable of fairly precise definition, and there need rarely be any doubt, or difference of opinion, as to whether a particular case is to be classed as of this nature or not. The chief symptoms are a constant feeling of fatigue, not relieved by rest, and the occurrence of various forms of hyperaesthesia, paraesthesia and localised pain. Two important physical signs constantly occur—exaggeration of the patellar reflex and tremor of the eyelids when the eyes are half closed. Added to these, there are, in greater or less degree, characteristic mental features which constitute the picture of psychasthenia—namely, incoercible ideas, obsessions and monophobias."

This 'fairly precise definition' is disappointing. It places in one group the anergic victim of a hard world, the tremulous sufferer from an anxiety state, and the active and physically fit intellectual man who finds himself worried by obsessive doubts. The hysterical nature of many phobias prompts inquiry whether Dr Robertson places hysteria in this group, and on the next page the phrase "neurasthenia and all the psycho-neuroses" leaves us guessing what



are 'psycho-neuroses' as distinguished from the author's conception of neurasthenia.

The book is devoted largely to bacteriological theory and technique; immunization by autogenous vaccines is its main theme and in its general principles this is so fully and authoritatively accepted that it would be presumption to criticise it in this journal. The writer, however, departs from orthodoxy in attributing to certain diphtheroid organisms a pathological importance, especially in the production of neurasthenia. Other neurotoxic organisms are accountable for a great amount of mental and nervous disease. His evidence in regard to neurasthenia rests upon three statements: firstly, the finding of particular organisms in cases of neurasthenia; secondly, the aggravation of all the neurasthenic symptoms (p. 224) by overdoses of vaccine derived from the organism; and, thirdly, the benefit resulting from immunization.

The second statement is baldly put with no information as to what the symptoms are that are aggravated. Any lowering of bodily health may influence mental symptoms and most of us harbour organisms which, if grown in culture and injected as a vaccine, would produce at least malaise. In fact, experience of typhoid inoculation teaches that a vaccine derived from a bacillus presumably foreign to the patient can produce a severe reaction, and in the army the reviewer was familiar with cases in which the inoculation was followed by an outbreak of neurotic symptoms in men already predisposed to neurosis. The results claimed for vaccine therapy cannot be discussed in the absence of clinical information.

Dr Robertson seems to be aggrieved with his brother bacteriologists who reject his evidence concerning diphtheroid organisms, and (p. 219) protests against the total neglect, by certain writers, of bacterial toxic factors in the pathogenesis of neurasthenia: "They have done nothing to refute the evidence; they have simply ignored it."

His evidence in the case of Dementia Precox is as irrefutable, because of its elusiveness, as that concerning neurasthenia; six cases are described in which old friends like *streptococcus pyogenes* and *micrococcus catarrhalis* were found freely with their diphtheroid companion, and in one case recovery from 'dementia precox in its early phase' took place after a course of immunization.

Dr Robertson is plainly a man of independent opinions and with his skill in technique should be a valuable co-worker in our subject; but his attitude towards psychological research is unfortunate. Mind is "only a concomitant of a reaction in the psychical centres of the brain" and "such a view of the nature of mind has no place for the unconscious, or subconscious mind" (p. 221). Further, "The psycho-analysts are also in error in holding that a so-called subconscious suppressed complex can act as a pathogenic agent, disturbing the course of normal mentalization. Tanzi and Lugaro have dwelt upon this error and exposed it."

The phrase "subconscious suppressed complex" suggests that its user has no first-hand acquaintance with the literature. There have been many confirmations of and contributions to the theory of the unconscious since Tanzi and Lugaro exposed its error in 1916.

One wishes that Dr Ford Robertson could recognise the present limitations of the purely physiological view of mental processes; in his own words, "Science demands that, in seeking to reach the truth regarding any of its problems, all the known factors shall be taken into consideration."

MILLAIS CULPIN.

*Psycho-Analysis.* By R. H. HINGLEY, B.A. Methuen & Co., 1921. pp. 185. 6s.

This is one of the legion of popular works on this subject that are now falling from the press like leaves in autumn. The enthusiastic and altruistic spirit in which it is written marks it out from many of them; it is a well-meant attempt to convey to others an idea of the benefits which a study of psycho-analysis may yield, and to indicate some of the means by which they may be obtained; and as such it engages interest and to some extent disarms criticism. But beyond some value of a propagandist nature it has little merit.

The aim of the book is stated to be "to give a plain account of psycho-analysis," but both this statement and the title are misleading in reference to its actual contents. For, quite apart from what he acknowledges to be his "sympathetic criticism," the writer has not been able to refrain from introducing views of his own as "psycho-analysis," and from consciously or unconsciously misrepresenting in a radical manner the conclusions of psycho-analysis. Where an adequate knowledge of the subject has not first been acquired, something of this kind is probably inevitable, no matter how fair and honest a writer's intentions may be.

A great and evidently quite sincere show of fairness to psycho-analysis is made throughout the book, with one exception, which curiously enough reveals itself as a 'displacement on to a detail' of the whole difficulty. In the matter of the uses of certain terms (*e.g.* unconscious, *Libido*, etc.) the writer repeatedly and unhesitatingly, without reason or argument, pronounces psycho-analysis to be "unpsychological" and leaves it at that. On p. 76 we find this attitude on the point clearly related to another attitude derived from academic psychology—namely, a depreciation of the place of affects in mental life and a desire to substitute for them some other force in mental dynamics. In consequence we find such a momentous question as that of the pleasure and reality principles handled with an airy sketchiness by which serious discussion is avoided; and in its place the writer does not hesitate to advance his own opinion, without any evidence, that the truth lies midway between Freud and McDougall. The whole book, in fact, is an expression of this subjectively-determined attempt at a compromise between psycho-analysis and academic psychology. The same thing is seen concerning 'anxiety'—a matter about which a very insufficient grasp of psycho-analytic views is evident, all the more inexcusable since this subject has been very fully dealt with in psycho-analytic literature. In regard to other important matters, *e.g.* symbolism, the homosexual stage of *Libido*-development, and above all the technique of treatment, definitely false statements are made.

As has been said, the spirit of the instructor and reformer breathes through the book; hence we are not surprised to find the allusions to the "aim of psycho-analysis" that are so common in this class of book, and the inevitable chapter or two on "psycho-analysis and education." It is necessary to reiterate that psycho-analysis has no aim, beyond that common to all science—the pursuit of knowledge with a view to the ultimate conversion of knowledge into power; the true mark of the scientific mind lies in the capacity to postpone such conversion and to pursue investigations until such time as they can render an unquestionable and not too costly service to the world. Freud and those best fitted to form opinions on this matter have been exceedingly guarded in expressing their views about the application of psycho-analysis to education.

But here, as so commonly, the importance of the "provision of opportunities for sublimation" is much exaggerated, and in general the writer gravely overestimates the parents' rôle, particularly in his insistence on the importance of "confidence" between parents and child in order that the child's unconscious may be open to the parents' influence. One sometimes cannot avoid a feeling of dismay about the fate of the children of this generation who will be subjected to the experimental handling of parents with a smattering of psycho-analysis. The old-fashioned God who knew all was alarming enough in the childhood of our grand-parents; a replacement of Him by the parent in the flesh would seem to close to our grand-children all avenues of escape from the horror. Those with any real knowledge of the truth of psycho-analysis—above all knowledge gained by experience and not from reading—are well aware that anything in the way of analysis of child by parent is impracticable and impossible, by reason of emotional factors on both sides. The advantages of analytic knowledge in the parent will be found in its application to the broad lines and general principles of training, and not to the opportunities it offers of prying into and "influencing" the child's mind. The parents' attention is mainly required in connection with the surrounding conditions; the child must develop itself.

In conclusion, it should be repeated that as a laudable and honest attempt to confer an acceptable benefit on the human race by means of a small dose of diluted psycho-analysis the book cannot be condemned, but that as a serious contribution, even to popular knowledge of the subject, it is negligible.

On the other hand, it may be hoped that it will arouse interest in some who may then be impelled to pursue their study further.

JOAN RIVIERE.

*The Psychology of Medicine.* By T. W. MITCHELL, M.D. Methuen & Co., Ltd. pp. 179. 6s. net.

Under this rather non-committal title the author gives a concise and closely reasoned account of all the modern developments of psychology as applied to medicine.

The book opens with an account of the work of the mesmerists and then passes on to a consideration of the phenomena of hypnotism and of hysteria. Janet's theory of dissociation is carefully expounded and the necessity for a more dynamic explanation of these conditions is demonstrated. This serves to introduce Freud's conception of repression. Psycho-analysis as a body of doctrine, as a method of psychological investigation and as a therapeutic instrument is then dealt with, special chapters being devoted to dreams and the unconscious. In the latter there is a very helpful attempt to unravel the rather confused terminology which clings to this aspect of psychology. The book closes with chapters on the various neuroses and on psycho-therapeutic procedures.

In covering all this ground, in what must be admitted to be an adequate manner, within the modest compass of 180 pages Dr Mitchell has achieved a real *tour de force*. The book is intended primarily for the use of "readers who have had no professional training in either medicine or psychology," or of those professional students who desire to make a "preliminary survey" of the

ground. The requirements of both these classes are not quite identical, but one must admit that Dr Mitchell has avoided, on the one hand, an altogether too cursory sketch, and, on the other, a too perplexing condensation of his subject-matter, and thus as nearly as possible meets the demands of both types of reader. He achieves this compromise largely through the successful use of the historical method in the earlier chapters. It has often been contended that the historical method of treatment is fatal to clear exposition, but the present volume illustrates what can be done not only to render the subject interesting but also to present it in a succinct and eminently readable fashion by regarding the subject to some extent from the point of view of its development.

The book can be heartily commended to those for whom it appears to have been written. Even those who have some acquaintance with the subject can find in Dr Mitchell's volume a very clear exposition of the fundamental principles of modern psychology as applied to medicine. Here they will find a wonderfully complete and orderly statement of all those essentials which otherwise can only be acquired by dint of strenuous application coupled with wide reading.

W. McALISTER.

*Insanity and Mental Deficiency in Relation to Legal Responsibility.* A Study in Psychological Jurisprudence. By WILLIAM G. H. COOK. xxiv + 192 pp. Routledge. 10s. 6d. net.

This treatise, which was approved as a thesis for the degree of Doctor of Laws in the University of London, is an admirable survey of the law relating to torts, contracts and testamentary capacity as applied to the insane in the light of such precedents as exist. The law relating to the civil responsibility of lunatics has been generally admitted to stand upon very insecure foundation, and in this book Dr Cook has undertaken the task of setting out a statement of the law as declared by Statute or Courts of Justice, and also as in his opinion it ought to have been declared to be. To this end he has carefully examined upwards of 200 cases and the laws of many other countries for comparative purposes. Both for torts and contracts it is submitted that lunatics should be treated on the same footing as infants, as being incapable. The present law as to contracts, that the contracts of an insane person can only be avoided when the insanity can be shown to have been known to the plaintiff, is considered to be unsound in that the decision for the precedent rested upon other cases, which in fact were decisions as to contracts for necessities, and moreover the law relating to capacity of lunatics to marry does not follow out to its logical conclusion this ruling. No hard and fast rule is laid down as to testamentary capacity and the ruling that each case must be dealt with upon its own merits will find favour and support from psychiatrists. The book ends with two appendices: (1) a summary of chief powers and duties of lunacy and mental deficiency authorities in England and (2) suggestions for the reform of lunacy and mental deficiency administration. As regards the latter it would seem to be in the national interest, both from the point of view of efficiency and economy, if the maintenance of all pauper lunatics and feeble-minded persons was made a national charge, so as to do away with the law of settlement of paupers, their care and treatment being placed in the hands of a Central Authority.



The book is full of valuable information and should be of great assistance to all those who have to deal with the question of insanity. It might be objected by psychologists that its sub-title is hardly justified inasmuch as the psychological problems involved are scarcely touched upon, but for all that the conclusions are sound enough. And again most psychiatrists will still agree with Lord Blackburn that it is impossible to find a satisfactory definition of insanity though Dr Cook holds that it is now possible to give a definition which is both comprehensive and satisfactory, and they will also object to his broad use of the term 'mental deficiency,' which is now only used in the technical sense as being restricted to cases of innate deficiency which come under the Mental Deficiency Act of 1913.

E. PRIDEAUX.

## ABSTRACTS.

*The Group Mind.* A sketch of the principles of collective Psychology, with some attempt to apply them to the interpretation of national life and character. By WILLIAM McDougall, F.R.S. Cambridge University Press, 1921. pp. xvi + 304.

This book is a sequel to the author's *Introduction to Social Psychology*, which was first published in 1908 and which has met with such widespread success. There can be little doubt that the present volume will be equally well, if not better, received by the general reading public. The two volumes together form what may be called a general system of Psychology and have established Prof. McDougall's position as a worthy successor of William James and as one of the leading psychologists of modern times.

In the earlier volume the foundations were laid of a science of the mind, doing equal justice to its biological and psychological aspects, and in the book before us we find McDougall applying the general principles thus acquired to the solution of the problem of the Group Mind. He makes it clear that, in his view, group psychology is not identical with sociology. The province of the latter science is much wider since it comprises contributions from other sciences such as climatology, epidemiology, physiology, genetics and economics, so far as they have bearing upon the life of individuals in society, whereas the more restricted task of group psychology is to examine

the conception of the collective or group mind, in order to determine whether and in what sense this is a valid conception; to display the general principles of collective mental life which are incapable of being deduced from the laws of the mental life of isolated individuals; to distinguish the principal types of collective mental life or group mind; to describe the peculiarities of those types and as far as possible to account for them....Some writers have assumed the reality of what is called the 'collective consciousness' of a society, meaning thereby a unitary consciousness of the society, over and above that of the individuals comprised within it. This principle is examined in Chapter II and provisionally rejected, but it is maintained that a society, when it enjoys a long life and becomes highly organised, acquires a structure and qualities which are largely independent of the qualities of the individuals who enter into its composition and take part for a brief time in its life. It becomes an organised system of forces which has a life of its own, tendencies of its own, a power of moulding all its component individuals and a power of perpetuating itself as a self-identical system subject only to laws of gradual change.

McDougall is able to conceive of group organisation as a form of mental unity because he regards the individual mind as most satisfactorily defined as "an organised system of mental and purposive forces" and in this sense it is clear that any social group might rightly be said to possess collective mind. His main reasons for denying the existence of a collective *consciousness* are two in number. First that it would involve the assumption that "the consciousness of the units is used twice over, once as an individual consciousness, once as an element entering into the collective consciousness; and no one has been able to suggest how this difficulty can be surmounted." Secondly, the analogy of an individual organism as the collective consciousness of its cells, with a

society as the collective consciousness of its units, breaks down in one very important respect. There is a spatial continuity of the cells in an individual organism which seems to be the essential condition of the fusion of the consciousness of the cells, whereas no such continuity exists among the individual units of the social group.

The central idea in McDougall's whole discussion is that of "organisation" and he brings out the essential importance of this conception by dealing in successive chapters with the "mental life of the crowd" and the "highly organised group." Even in the crowd a minimum of organisation is essential for it to become a psychological crowd.

There must be some degree of similarity of mental constitution, of interest and sentiment among the persons who form the crowd, a certain degree of mental homogeneity of persons who form the group and the higher the degree of this mental homogeneity of any gathering of men the more readily do they form a psychological crowd and the more striking and intense are the manifestations of collective life.

Under these conditions one of the most characteristic results of the formation of a crowd is the great exaltation or intensification of emotion produced. Individuals when in a crowd may have their emotions stirred to a pitch seldom attained under other circumstances; they feel carried out of themselves, caught up by their emotion and swept clear of feelings of individual limitation. One of the most characteristic intensifications of emotion in a crowd is the phenomenon of panic, and McDougall says panic is "the crudest and simplest example of collective life." He explains the intensification of emotion in a crowd by what he calls the principle of primitive sympathy.

The principle is that in man and in the gregarious animals generally each instinct with its characteristic primary emotion and its special impulse is capable of being excited in one individual by the expressions of the same emotion in another, in virtue of a special congenital adaptability of the instinct on its cognitive or perceptual side. In the crowd the expressions of fear of each individual are perceived by his neighbours and this perception intensifies the fear directly excited in them by the threatening danger.

In other cases again the intensification of emotional response may be explained by the fact that each member is aware of the crowd as a whole and conscious of his membership in that whole and thus loses his sense of individual responsibility, and gives himself up to the prevailing emotion without restraint. Dr Le Bon has compared this state of the individual merged for the time in the crowd in action to the state of fascination in which the hypnotised individual finds himself in the hands of the hypnotiser. But as McDougall points out "crowds undoubtedly display great suggestibility but great suggestibility does not necessarily imply hypnosis; and there is no ground for supposing that the members of the crowd are thrown into any such condition save possibly in very rare instances." Finally, a crowd acts by impulse, not by volition, and in its lack of self-consciousness and sense of responsibility is comparable to "an unruly child or an untutored passionate savage in a strange situation."

Whereas the mentality of the individual tends to be lowered in a crowd, in more highly organised groups the result is less detrimental; indeed, with a sufficient degree of organisation, the group mind may rise to a level superior to that shown individually by most, if not by all, of the members of the group. McDougall enumerates five conditions which are of importance in raising the collective mental life to such a higher level. These conditions are (1) continuity of existence of the group; (2) some adequate idea in the mind of each of its

members of the nature of the group, its position, functions and capabilities and of the relations of the individuals to the group; in this way there may spring up within each individual member a *sentiment* for the group; that is, an organised system of emotional dispositions centred about the idea of the group; (3) the interaction of the group with other similar groups animated by other ideals and purposes, especially if this interaction is in the form of conflict or rivalry. Such interaction greatly promotes the self-knowledge of each group; (4) "the existence of a body of traditions and customs and habits in the minds of the members of the group, determining their relations to one another and to the group as a whole"; (5) a differentiation and specialisation of the functions of its constituents, *i.e.* the organisation of the group.

McDougall has defined volition and distinguished it from simpler forms of conation by saying that it is "a reinforcement of any impulse or conation by one excited within the system of the self-regarding sentiment" and he has shown in his *Social Psychology* how the self-regarding sentiment may become extended to other objects than the individual self and to all objects with which the self identifies itself which are regarded as belonging to the self or as part of the ideal self. He is now able to show that any highly organised group such as the patriot army is capable of true collective volition or "general will" through the blending of the self-regarding sentiment of each individual with his sentiment of patriotism.

The science of collective volition is not merely the direction of the wills of all to the same end, but a motivation of the wills of all members of the group by impulses awakened within the common sentiment for the whole of which they are parts. It is the extension of the self-regarding sentiment of each member of the group to the group as a whole that binds the group together and renders it a collective individual capable of collective volition.

McDougall proceeds to show, with reference to different levels of cultural development, that the group self-consciousness or the group spirit is the great socialising agency. It destroys the opposition and conflict between the crudely individualistic and the primitive altruistic tendencies of human nature. Groups are not always mutually exclusive, and an individual may share in the self-consciousness of more groups than one so long as their natures and aims do not necessarily bring them into rivalry. This principle of multiple group consciousness in each individual is of the utmost importance, for

it allows the formation of a hierarchy of group sentiments for a system of groups in which each larger group includes the lesser; each group being made the object of the extended self-regarding sentiment in a way which includes the sentiment for the lesser group in the sentiment for the larger group in which it is comprised. Thus the family, the village, the county, the country as a whole, form for the normal man the objects of a harmonious hierarchy of sentiments of this sort, each of which strengthens rather than weakens the others and yields motives for action which on the whole co-operate and harmonise rather than conflict.

McDougall contrasts this with the collectivist ideal, as set out for example in Plato's *Republic*, which aims at developing in all members a sentiment of devotion to the whole while suppressing the development of sentiments for groups within the whole. In criticism of this plan McDougall writes

this sentiment for the all-inclusive group cannot be effectively developed save by way of development of the minor group sentiments and, though it may succeed with some persons, there will always be many who cannot grasp the idea of the larger whole sufficiently firmly and intelligently to make it the object of any strong and enlightened



sentiment of attachment; such persons will be left on the purely egoistic level whereas their energies might have been effectively socialised by the development of some less inclusive group consciousness.

The truth is that "the smaller groups harmonise more effectively than the larger groups the purely egoistic and the altruistic motives except, of course, in the case of those few persons who can play leading parts in the life of the larger group." If it be objected that the group spirit fosters rivalry and conflict the reply may be made that "the antagonism between men who are moved to conflict by the group spirit is less bitter than that between individuals who are brought into conflict by personal motives; for the members of each group or party, though they may wish to frustrate or even to destroy the other party as such, may remain benevolent towards its members individually."

The above is a brief summary of the first-third of McDougall's volume. The remaining two-thirds are devoted to the consideration of the national mind and character and the processes of their development. Although of the utmost value and interest they have not the same importance for medical psychology. The book teems with challenging statements and original points of view. Among so much that constitutes solid advance in psychological theory, one may single out for special emphasis the theories of individual and collective volition, which in their strict parallelism mutually confirm one another, and the conceptions of psychological organisation and group self-consciousness and self-knowledge. It is especially in these respects that the book is so much more satisfying than the brilliant commentary upon it which Freud has written under the title "Massenpsychologie und Ich-Analyse" (*Internationaler Psychoanalytischer Verlag*, Leipzig, Wien, Zürich, 1921) from the point of view of his own Libido theory.

WILLIAM BROWN.

*The Psychology of Day-dreams.* By Dr J. VARENDONCK, with an Introduction by Prof. Dr S. FREUD. London: George Allen and Unwin, Ltd., 1921. pp. 367.

*The Psychology of Day-dreams* is written in order to throw light on a part of the mechanism of thought which has hitherto been insufficiently investigated. The book, which is prefaced by an introduction by Freud, is addressed especially to English readers, the English being, in the author's opinion, of all nations the most interested in psycho-analysis.

Dr Varendonck's terminology, as Freud points out in the introduction, calls for some comment. He defines the day-dream as "the product of affective thinking on the fore-conscious level." Hence he employs the term "fore-conscious" thinking, to which Freud takes exception on the ground that day-dreaming does not owe its peculiarities to the circumstance that it proceeds fore-consciously. The term "affective" thinking, used later in the book, is also open to criticism, so too Bleuler's term "autistic" thinking. The author himself is alive to the ambiguities of his terminology, but considers it of secondary importance to his aim of detecting the nature of this special thought-mechanism. Freud prefers the term "freely-wandering" or "phantastic" thinking.

After a preliminary chapter on realistic as opposed to phantastic thinking, the book falls into two main parts: an analytical and a synthetical section,

while in the concluding chapter the author discusses the function of the day-dream and takes a brief survey of the difference between conscious and fore-conscious thinking.

The observations contained in the *analytical section* were, for the most part, made during the war, when the author was serving as interpreter with the British Army. He records some of his own day-dreams and the conclusions he reaches are the result of a thorough analysis of the chains of thought which he accustomed himself to retrace.

In the three successive chapters in which the genesis, contents and termination of such chains are considered, he shows that in every instance they originate in some emotionally emphasised memory, arising either from an outer stimulus or an inner perception, and that the progress of the chain is directed by a wish. The process is always accompanied by visual images, but includes also verbal thought-constructions and approaches more nearly to the dream process or to conscious, directed thinking, according as the one or the other element prevails. The last link is, like the first, a memory, and awakening from fore-conscious thought takes place under the influence of an affect or an external stimulus at a moment of mental passivity or "memory-drifting."

In the fore-conscious state we have at our disposal more recollections than in the conscious state; further, memory is no longer "an inert mass," but "a dynamic contrivance," which, like the "unlimited capacity for forgetting" which characterises the fore-conscious state, fulfils an active function in the formation of the day-dream.

The weaknesses of this mode of thinking are soon apparent. There is a marked unsteadiness due to the fascination exercised by memory and the fore-conscious cannot correct its mistakes or recall links in the associative chain. Further, the critical faculty is weakened: in the fore-conscious, hypothesis becomes reality, and errors and absurdities are perpetrated. True, a certain selective activity is shown (Dr Varendonck demonstrates that the thought proceeds by a succession of suppositions advanced to meet the desired end), but, where there is evidence of sound critical judgment, we may suppose that there is a rising towards the level of consciousness.

The difference between day-dreams and night-dreams is only briefly touched upon, but we are told that "the impressions left by a day-dream and a night-dream respectively, although they defy description, are indeed very different to a careful observer." Possibly the difference depends on the relative awareness of accompanying gratification.

The latent content of the day-dream is not referred to and the relation of fore-conscious to unconscious wishes is mentioned only in passing.

In the *synthetical section*, Dr Varendonck discusses the part played by affect in the mechanism of fore-conscious thought-activity, which he treats under the heads of memory, apperception and ideation. He regards affect as forming the active connection between memory and perception: "in fore-conscious thinking the relation between memory and affect is causative--affects may stimulate recollection: conversely, remembrances may provoke dormant affects."

Again, in apperception affect is of supreme importance and its intervention may give rise to erroneous perceptions or, by a protraction of the apperceiving process, to chains of fore-conscious associations.

In the chapter on ideation and affect it is shown that, as there is a

centripetal form of affect leading to perception, so there is a centrifugal form leading to conception. Fore-conscious thought is directed by a wish and a wish is feeling applied to an end.

The relation of fore-conscious to conscious attention and that of wish to will are discussed at some length. Fore-conscious attention is defined as "the manifestation of the wish when it bears upon a fore-conscious perception." In consciousness, on the other hand, attention does not necessarily coincide with interest or perception. "In fore-conscious attention...a connection has been established between affect and intellect, which leads to the fore-conscious awareness of a memory element in the forum of the mind." Strictly speaking, awareness implies consciousness. The fore-conscious awareness of the author might be described as that susceptibility of the fore-conscious which promotes thought activity as the result of a stimulus not consciously perceived.

Passing to the discussion of wish and will, Dr Varendonek defines will as "an acknowledged wish which has become conscious," volition having taken over the rôle of affect in the control of our mental processes. In his subsequent definition of will as the awareness of our power to use mental energy (freed of affect) for achieving a conscious purpose—a definition which includes the function of conscious attention and the process of conscious repression—the essentially dynamic nature of will seems to be somewhat lost sight of.

In the chapter dealing with intuition and repression and their relation to mental evolution, intuition is regarded as the reverse of repression; for, while the latter clears the field of consciousness at the expense of the fore-conscious, intuition is an invasion into consciousness of fore-conscious modes of thinking.

The inhibitory aspect of affect is not considered, nor its relation to repression, and the differentiation of affects accompanying memory traces is superficial.

Of special interest to the general reader are the views put forward with regard to fore-conscious thinking in relation to creative thought, to visualisation and to the mechanism of insomnia.

Tracing the evolution of thought processes, the author shows how there has been a progressive separation of the mental processes and the motor system. In fore-conscious thinking the two are interdependent; only in voluntary thinking are we able to separate at will intellection from motor reaction. All thought is to be regarded as an attempt at adaptation under the authority of the pleasure principle.

"This investigation," concludes Dr Varendonek, "tends to establish that the unconscious, fore-conscious and conscious thought-processes are three manifestations, varying only in degree, of the same function. This function, originally regulating the relations of the individual with the outer world, constitutes a manifestation of universal energy and is as eternal and unceasing as the other organic activities in the service of adaptation."

CECIL M. BAINES.

*Zur Psychologie der Amputierten: Ein Beitrag zur praktischen Psychologie.* By NARZISS ACH. pp. 30. 1920. Verlag von Wilhelm Engelmann. Leipzig.

Illustrated almost entirely by references to amputations of the arm. Falls into the following sections:

I. *The patient in hospital.* Psychological effects of amputation. (a) General depression with loss of courage and desire for life. (b) Inhibition of general motor activity. (c) Tendency to withdraw from reality, accompanied by physical and mental sense of loss of personal worth.

This condition has to be met by diverting the patient's thoughts from himself. This is attempted by various methods. (1) Providing books, lectures, entertainments, etc. (2) Providing work to rekindle his interest in life. (3) Placing him with other patients who have also suffered amputation.

Effect of amputation on different temperaments. Three groups. (1) Those who give up completely and consider that the State should support them. (2) Those who are determined that their condition shall not unfit them for life. (3) The largest group which comes between these two. The higher the degree of education, the easier it is to renew the interest in life.

*Psychogenic muscle exercises.* The patient is directed to think that he is making certain movements in the lost limb. This brings into play the muscles which remain in the stump and the body. *Paraesthesia* in patients suffering from amputation.

II. *The patient and the artificial limb.* The patient should be allowed as much choice as possible in order to get him to use the limb. His psychology should be taken into account in the choice of the artificial limb and of the occupation for which it is designed and he is to be trained. If possible, it should enable him to return to his former occupation. Various types of limbs. Where the patient has to move muscles to work them, the movements should correspond to those to which his brain was accustomed in moving the real limb. Considerations of fatigue and strain of attention.

III. *The patient and his will to work.* "Pension-fear." Care should be taken not to put him into occupation for which he is unsuited. An occupation where he is his own master is best. Necessity of providing an artificial limb soon.

C. M. B.

*Psychodiagnostic: Methodik und Ergebnisse eines wahrnehmungs-diagnostischen Experiments (Deutenlassen von Zufallsformen).* By Dr HERMANN RORSCHACH. pp. 174. 1921. Ernst Bircher, Verlag in Bern und Leipzig.

Dr Rorschach describes the methods and results of a psychological experiment, first attempted in 1911, the object of which is to arrive at a diagnosis of the subject's mentality by causing him to interpret certain indeterminate figures with which he is presented.

These figures are produced by blots or smudges upon sheets of paper and the experiment is conducted with ten such sheets, the results in the various cases, both of normal and abnormal persons, being carefully compared. Points noted during the experiment are: the distinctness with which the figure is perceived, the relation between the kinaesthetic factor and that of colour, the apprehension of the figure as a whole or in parts, etc.

From the different modes in which the figures are perceived certain psychological types emerge, broadly divided by the author into (a) *types of apprehension* (or intelligence), and (b) *types of experience* (or reaction of life).

(a) Under types of apprehension he distinguishes abstract thinkers, practical men, men of imagination, and so forth, recognised by the so-called "components" of intelligence, e.g. concentration.



(b) Types of experience are determined by the relation between the subject's extraversive and intraversive tendencies, as evidenced in the relation of his perceptions of colour and movement in the test-sheets.

These relations indicate also the labile or stable affectivity of the subject, a preponderating kinaesthesia indicating stability, and the preponderance of colour-perception a labile affectivity.

Correlatives with the "experience-type" are found in certain components of intelligence, conditions of affectivity, characteristics, talents, modes of perception, and types of hallucination and of neurotic or psychotic affections—these functions and phenomena being subject to the oscillations in the "experience-type," due to depression, elation, fatigue, etc.

By means of the experiment, variations in the type may be observed and comparisons drawn in the case of individuals and of different sexes, families or races.

The type, however, merely signifies a form of reaction to, or equipment for, life. Action and content are determined by impulse and trained thinking, and the author points out that such thinking is largely opposed to the capacity for experience. He considers that the experiment has real diagnostic value, whether in estimating the personality of normal people, or in discovering the nature of a psychosis or neurosis. Further, a test of almost universal applicability is provided for conditions of intelligence and affectivity. The book closes with numerous examples, this section including some observations on the relation of the "form-experiment" to psycho-analytic work.

C. M. B.

*Psychopathologie der Ausnahmestände und Psychopathologie des Alltags.* By Dr ERWIN STRANSKY. Ernst Bircher, Verlag in Bern und Leipzig. Price: Fr. 2, 75.

In accordance with the aims of an *applied* psychiatry, as stated by him some years ago, the author endeavours to turn to valuable account for the psychology of normal mental processes theories and scientific findings drawn from the psychopathology of abnormal conditions. By this route he arrives at a special conception of the fundamental mental processes in the various abnormal conditions. Deviating somewhat from prevailing views, he regards what is so often looked upon as a "dissociation" or "doubling" of the mental personality as essentially a kind of displacement. The author examines the problem on the one hand from the clinical, and on the other from the psychological, point of view, and by way of individual psychology he takes the opportunity to pass into the realm of social and folk-psychology. Here is ground in many directions unbroken as yet by applied psychology, soil which, as the author emphatically asserts, will yield a rich harvest to those who in the future till it.

While not actually making use in this paper of psycho-analytic considerations, the attitude of the author is by no means one of hostility to, or rejection of, serious, critical psycho-analysis, but he energetically repudiates the more recent attempts to reform psychology from the side of philosophy, regarding them as the very opposite of applied psychiatry.

C. M. B.

## NOTES ON RECENT PERIODICALS.

## ANNALES MEDICO-PSYCHOLOGIQUES (Series XI—Vol. I).

## No. 1. January 1921.

*Rapports des commotions de guerre et de la constitution émotive.* (Dr H. Le Savoureux.)

Does the physical shock produced on the battlefield itself give birth to hyper-emotional symptoms through mere mechanical disturbance of the nervous system, without the aid of simultaneous emotional shock or predisposition? Some 200 cases are dealt with.

*A propos de la "folie religieuse."* (Dr Ch. Ladame.)

Two groups are distinguished: (1) in which the delirious ideas and hallucinations merely reflect the religious belief of the subject; (2) in which the cause is a psychical trauma (most often of a sexual nature).

*Contribution à l'étude des formes psychiques de la poliomyélocéphalite épidémique.* (M. Louis Livet.)

Two cases are discussed, the main result arrived at being the diagnostic value of temperature.

*Des délires alcooliques à la suite des mesures législatives et administratives prises pendant la guerre.* (Dr de Clérambault.)

Statistics are given showing great diminution in number of cases, as a result.

*De la mimique hallucinatoire et du diagnostic de l'hallucination auditive verbal.* (M. Querey.)

Three cases are dealt with in which the subject, seemingly, denies to his hallucinatory experiences any sensory content.

## No. 2. February 1921.

*Rapports des commotions de guerre et de la constitution émotive.* (Dr H. Le Savoureux.)  
(Continuation from No. 1.)*A propos de la "folie religieuse."* (Dr Ch. Ladame.)  
(Also continuation from No. 1.)*Délire érotique avec perversion sexuelle.* (Ph. Chaslin et P. Chatelin.)

An interesting account of a case over a period showing several relapses after improvement; in which also remarkable literary ability, foreign to the normal personality, was shown.

*Contribution à l'étude comparée des divers traitements actuels de l'épilepsie.* (J. Roubinovitch et J. Lauzier.)

A record of experimentation with various drugs.

*Syphilis héréditaire et épilepsie.* (M. R. Leroy.)

Record of a case of epilepsy completely cured by novarsénobenzol.

*Encéphalite épidémique asthénique et myoclonique avec crises bulbaires. Évolution continue depuis plus d'un an.* (MM. Raoul Leroy et Roger Dupony.)

An interesting record of a case leading to the conclusion that "l'agent pathogène" gains entry to the infundibular region and floor of the 3rd ventricle *via* the nasal passages.

## No. 3. March 1921.

*La manie chronique.* (M. Laignel-Lavastine et Jean Vinchon.)

A description of symptoms with emphasis of the importance of physical symptoms in diagnosis, and that the term 'chronic' does not necessarily imply incurability.

*De la kleptomanie au point de vue médico-légal.* (Dr August Wimmer.)

A criticism of the position that "true kleptomania, if it exists at all, is a pathological rarity."

*Mesures de la tension artérielle au cours d'états dépressifs.* (Dr H. Beaudouin.)

The conclusion is reached that hypertension is in all cases due to organic trouble.

*Le tréponème pâle est-il l'agent causal de la paralysie générale?* (L. Marchand.)

He favours the negative—the cause has yet to be found.

#### No. 4. April 1921.

*Le rôle de l'habitude dans la colonisation familiale des aliénés.* (Dalmas et Vinchon.)

An interesting discussion with suggestion as to use of "family houses," where conditions will be semi-normal, in treatment of recovering patients.

*L'œuvre du dispensaire des maladies mentales à Stockholm.* (Dr V. Wigert.)

Emphasis should be laid upon the great need for treatment of cases of worry and slight mental disorder, as in this dispensary.

*Délire de négation terminé par guérison—considérations sur l'hypochondrie et la mélancolie.* (F. Tissot.)

Neurasthenia, hypochondria and melancholia are three forms of the same depressive psycho-neurosis; in all three is found evidence of psychic predisposition, and, objectively, disturbing preoccupation as to the bodily, the mental, or the moral self.

*Écrits ironiques d'un paranoïaque halluciné.* (Dr F. Usse.)

A low form of humour, immoral and morbid, which may be considered a special perversion of the social instincts.

*Un cas de psychose maniaque dépressive à un jour d'alternance.* (A. Starobinski.)

A case of 30 years' standing.

*Mutisme acquis et persistant chez un enfant de 13 ans.* (Alfred Gordon.)

An interesting account of a case where total dumbness followed the reading of a story about dumbness, and in which the psychic character of the child was completely changed.

*Sur la nature de la démence survenant au cours de certains délires (à propos de deux cas de délire d'influence).* (Dr M. Migrard.)

*Hallucinations lilliputiennes, délire et puérilisme.* (M. E. Martmor.)

#### No. 5. May 1921.

*Les formes verbales de l'interprétation délirante.* (Dr Paul Guiraud.)

Two kinds of cases are discriminated: (1) in which the conclusions have logical justification, and are due to a prevailing affective state which produces "polarisation" of association of ideas and association of words or syntheses, (2) in which the conclusions have not logical justification, and are due to an organisation of the elements of the central theme according to different laws from those of ordinary psychology, the dominating factor being intensity of "affective potential."

*Note sur quelques cas anormaux de mélancolie.* (Ph. Chaslin, P. Chatelin, I. Meyerson.)

An account of three cases.

*Encéphalite épidémique et divorce (contribution à l'étude médico-légale des formes mentales de l'encéphalite épidémique).* (M. Georges Petit.)

A woman about to be married became melancholic, declaring she was not fit to marry. Under medical treatment she recovered, but three weeks later relapsed. The marriage took place although she objected. No improvement followed and the husband applied for divorce. The Society discussed the case.

*Sur un cas de délire d'interprétation.* (Xavier Abély.)

An alcoholic suffered from delusion that his wife was unfaithful. The delusion increased in strength, especially after he became blind. The relative responsibility of diabetes, alcoholism and heredity for his misfortune is discussed.

## JOURNAL DE PSYCHOLOGIE NORMALE ET PATHOLOGIQUE

(XVIII<sup>e</sup> année).

No. 1. January 1921.

*Sur le psychisme inconscient* (1) (Fr. Paulhan).

Mental processes, as perception and recognition, which are usually classed as 'conscious' processes may be carried on without any conscious awareness. That which is acquired in this manner unwittingly differs in nowise from that which is obtained unwittingly and may be available to consciousness. That which is perceived, without conscious awareness may later be recognised consciously as known.

*Le rire* (G. Dumas).

Five problems are dealt with: (1) The anatomical and physiological mechanisms of laughter; (2) Laughter as a psychological state—laughter from pleasure and laughter from perception of the comic are distinguished, the former being a general *joie de vivre*; (3) The basis of the comic—theories from Aristotle to Bergson discussed; (4) The psychophysical mechanism by which perception produces laughter; (5) Laughter as a social language.

*La conscience et la conscience du moi* (H. Wallon).

The evolution of self-consciousness from consciousness of an external 'reality.' When full self-consciousness is not attained or is lost—*e.g.* in the infant, imbecile and chloroformed subject—there is a tendency to exteriorise personal reminiscences. In contrast, the 'self' of fully developed self-consciousness transcends all spatial limitations.

*Une adaptation biologique du Freudisme aux psychonévroses de guerre—L'instinct et l'inconscient de Rivers* (H. Piéron).

A detailed review with sense criticisms the principal one of which is that to see in the psychoneuroses an effort of the organism to regain mental equilibrium may suit Freudian metaphysics but is out of harmony with the spirit of modern biology.

No. 2. February 1921.

*De l'automatisme dans l'imitation* (H. Delacroix).

Imitation at various levels from voluntary imitation to purely reflex automatic mechanical imitation—its development and relation to language and perception.

*Les oscillations de l'activité mentale* (P. Janet).

A brief outline of a course of study extending from 1918 to 1920.

*Sur le psychisme inconscient* (2) (Fr. Paulhan).

The supposed difference between unconscious mental activity and conscious mental activity is largely a metaphysical creation. Unconscious processes can be fully described in the same terms as conscious processes.

*Sur le phénomène du déjà-vu* (A. Gilles).

A short note in support of the view that explanation is to be found in the conscious recognition of things previously perceived subconsciously.

*Contribution à l'étude de l'instinct; comportement de quelques araignées* (Et. Rabaud).

Concludes that certain behaviour of certain spiders cannot be classified fairly as either instinctive or intelligent.

No. 3. March 1921.

*Théorie de la perception* (B. Bourdon).

Perception in general—perception of space—visual space—visual perception of movement—auditory space—development of perception of space.

*L'orientation lointaine* (Ed. Claparède).

Work on the ability of animals to move towards a place apparently desired but not yet an object of perception—the '*homing instinct*' etc.—is reviewed and the conclusion reached that the problem is very complex and needs more elucidation.



*La folie, pensée organique* (A. Hesnard).

Mental and nervous disorders have always a primary organic basis. Application of the notion of the unconscious in psychiatry has given valuable results but tends to obscure the organic origin of mental disorders. '*Psychognomonie*' is suggested, as the title of a psychological technique to explore the *total* mental content, in place of "*psycho-analysis* employed by Freud and his school in the arbitrary and illegitimate sense of the psychological analysis of sexuality."

*Caractère individuel et aliénation mentale* (W. Boven).

The character of those predisposed to mental disorder. Relation of type of character to type of disorder. Predisposition in relation to characters of ancestors.

*La réticence* (P. Courbon).

An analysis of the forms and use of reticence in insanity.

R. I. B.

### ARCHIVES SUISSES DE NEUROLOGIE ET DE PSYCHIATRIE

(An extract from Vol. VIII, No. 1).

*Sur les reactions musculaires d'ordre affectif. Leur relation avec les mouvements volontaires et les mouvements réflexes.* (W. van Woerkom.)

Seeks the cause of emotional reactions in the study of motor reactions. Distinguishes two groups of muscular reactions: (1) limited to region stimulated (emotional), (2) adapted towards an end. Discusses emotional reactions of young children and pathological cases. In pathological cases emotion inhibits voluntary action. Motor reactions not directed towards an end have probably been useful in evolution. Affirms that a primitive component of feeling is common to the reactions of those suffering from functional diseases of the brain and normal individuals and that general diffused reactions are the expression of purposive action in which the primitive factors have got the upper hand.

R. I. B.

### INTERNATIONAL JOURNAL OF PSYCHO-ANALYSIS.

1921. Part I.

### INTERNATIONALE ZEITSCHRIFT FÜR PSYCHO-ANALYSE.

1921. Part I.

The main contribution in this number of the *Journal* is an important article by Ferenczi on the subject of "Tic" (*tic convulsif*). Its interest lies in the fact that the subject has been little explored, and the position of these symptoms in relation to other mental or physical disorders has not hitherto been ascertained. Ferenczi's remarks are put forward tentatively, with a view to stimulating further observations and exploration of the subject, and are not advanced as final conclusions in any way. Nevertheless the main lines of his suggestions are sufficiently convincing to awake considerable interest and to justify an approximately definite position in relation to the other neuroses being accorded to this malady.

Various observations led to the supposition that tics have something to do with narcissism; this is supported by the reflexion that, although automatic, they constitute a preoccupation with the subject's *own body*, or a hyperaesthesia followed by a defence-reflex (of which a normal example would be the scratching of a pimple). It appears further that narcissistic and infantile traits have been clearly recognised as characteristic of sufferers from tic quite independently of psycho-analysis. Ferenczi gives reason for his belief that tics and stereotypics have a common origin and are essentially one phenomenon; the connection with onanism is brought out, many stereotypics evincing themselves under analysis as "equivalents of onanism"

—auto-crotism of course has an obvious connection with narcissism. The similarities and differences between this symptom and those of conversion-hysteria are referred to, the latter being described as “an auto-erotic symbolization of an object-relationship.” (Incidentally, an elucidation of the mechanism of the hysterical “leap from the mental to the physical” is given in this article, the first, we believe, to appear in psycho-analytic literature.) Tics, on the contrary, seem to have no relation to an external object, but to be derived either from constitutional narcissism, or from the secondary form of it conditioned by physical traumata—as when twitching of the eye-lids supervenes on a conjunctivitis. The narcissistic origin suggests a relation to the psychoses, and the author propounds a theory of the interesting connections between tic and catatonic conditions. Another link is shown in the connections between echolalia, tics, and what Freud has called the ‘organ-speech’ of narcissistic psychotics. Like all the author’s work, the article is condensed in form and the presentation entirely without superfluities; it succeeds brilliantly in its design of drawing attention to an important subject which will evidently repay closer investigation.

Berkeley-Hill contributes “A Short Study of the Life and Character of Mohammed,” which is rendered unnecessarily obscure by presuming an acquaintance with the life of Mohammed on the part of the reader. It has considerable interest, however, on account of the light thrown on the unconscious forces at work in the religion Mohammed bequeathed to “one-fourth of the human race.” The difficulties of dealing with Islam might well be lightened by a sympathetic understanding of the psychological factors behind its bewildering manifestations, especially since a peculiarly ambivalent attitude towards authority appears to be the essential element in them.

The Nicene creed of the Christian Church is the subject of a rather elementary analytic study by Cavendish Moxon. A mass of quite interesting interpretations, however, will be found put forward in too incoherent and cursory a manner. There follow some minor communications on the analytic interpretation of points in dreams.

Five of the extremely valuable Collective Reviews of recent literature on various subjects, which form a feature of this *Journal*, are contained in this number—namely, on the Unconscious, the Science of Religion, on Aesthetics and the Psychology of the Artist, on Mythology, and on Dream-Interpretation. There are also important book reviews, notably on Lipschütz’s work on the *Puberty Glands and their Effects* (1919).

The first number of the *Zeitschrift* for 1921 contains two papers delivered before the Hague Congress in 1920 by Jegersma and Stäreke. There is also the second part of Boehm’s contribution on Homosexuality contained in the previous number, which offers a very illuminating and entertaining analysis of a recent German pamphlet on a proposed method of dealing with prostitution in large cities, again showing the extremely close unconscious association existing between homosexual tendencies and prostitution.

J. R.

#### ARCHIV FÜR KRIMINOLOGIE (KRIMINALANTHROPOLOGIE UND KRIMINALISTIK).

Edited by Dr ROBERT HEINDL. Vol. 73, Nos. 3 and 4, 1921.  
Verlag von F. C. W. Vogel, Leipzig.

This number contains an article by Dr Wilhelm Ostwald of Leipzig on “The place occupied by Criminology in the whole body of Science.” Taking as his basis the theory of Comte, according to which it is possible to deduce the internal structure of a given science from its position in the whole structure of scientific knowledge, Dr Ostwald presents a schematic arrangement of this structure in general and of criminology in particular. His system is as follows. 1. Mathetics: (a) Logic, (b) Mathematics, (c) Geometry and Kinematics. 2. Energetics: (d) Mechanics, (e) Physics, (f) Chemistry. 3. Biotics: (g) Physiology, (h) Psychology, (i) Sociology. Applying this system to criminology, he concludes that this science in its most restricted sense falls under the

heading 3 *i* (Sociology) and represents the synthesis of all other branches of criminological science.

In an article entitled "The Criminal Police System and Anthropology," Arthur Macdonald of Washington discusses how far police records, and in particular the results of technical methods of identification, *e.g.* the taking of finger-prints, may serve the purpose of anthropological research.

Professors Allfeld and Beling and Dr Max Alsberg (barrister-at-law in Berlin) contribute papers criticising a treatise by Dr Robert Heindl on "Special Treatment of Habitual Criminals," being a supplementary proposal to the most recent German Criminal Procedure Bill. Dr Heindl recommends that in the new criminal procedure account be taken of the political revolution and that the rights of the accused and of his counsel be extended, while special rights (of arrest and search) be accorded to the State in the case of proved habitual criminals. The proposal is intended as a compromise, for the time of transition from old to new, which shall reconcile the most liberal general policy with the requirements of a sound policy of criminal law.

Prof. Mittermaier treats from the point of view of criminal jurisprudence the subject of the employment of means to procure abortion.

The *Journal* contains further the following articles: "Neerophilia and Neerodism," by J. P. L. Hulst (University of Leyden). "The Value for Criminal Psychology of Recent Researches in the subject of Internal Secretion," by Dr M. H. Goring. "Attempted Murder with Pathogenic Bacteria," by Dr Lempp. "Ill-Treatment of Children," by Dr F. Siegfried (Public Prosecutor in Switzerland), and various notices and reviews of German, English, American, French, Spanish and Italian books and journals.

C. M. B.

## AN EXPERIMENTAL STUDY OF THE MECHANISM OF HALLUCINATIONS<sup>1</sup>.

BY MORTON PRINCE.

I ASSUME that the members of this Association are familiar with the traditional theories of the mechanism of hallucinations. I shall, therefore, not refer to them beyond remarking that they may be all classed under one or the other of two groups, viz. the anatomico-physiological theories and the psychological theories; and that all are inadequate and unsatisfactory. It remains therefore to attack the problem anew and, if possible, by experimental methods. We have open to us several methods of attack:

1. By inducing artificially hallucinations, particularly visions depicting known antecedent experiences. A study of their content permits of inferences regarding an underlying process related to the antecedent experiences.

2. Hypnotic methods by which through introspection memories of subconscious processes correlated with the hallucination are obtained.

3. Subconscious, or so-called automatic, script recording subconscious processes during a correlated hallucination.

4. A combination of all three methods.

### 1. Artificial Hallucinations.

I have made studies of a large number of artificial hallucinations in the course of many years experimentation and some twenty years ago published one such study<sup>2</sup>. They are commonly called 'crystal visions,' because the usual technique is to direct the attention by the use of a crystal into which the subject gazes (crystal gazing). A crystal of course is not essential. Merely fixing the attention with expectation of the development of the phenomenon is sufficient with susceptible subjects. An examination of the content of visualizations thus produced shows that they are identical in structure and action with many of the hallucinations of the insane as well as with the spontaneous hallucinations of the sane (Joan of Arc, Fra Angelico, Catherine of Sienna, Margaret Mary of the Sacred Heart, Arch-Duke Charles of Austria, *et alii*). They are

<sup>1</sup> Presented at the eleventh annual meeting of the American Psychopathological Association, Atlantic City, 11 June, 1921.

<sup>2</sup> "An Experimental Study of Visions," *Brain*, LXXXIV, Winter Number, 1898.



essentially and psychologically hallucinations artificially induced. (Parenthetically I may remark that it is an extraordinary thing that psychiatrists and psychologists have neglected them as objects of study, as plainly we have here phenomena that can be subjected to experimentation and are capable of giving an insight into the mechanisms of the mind and, as we shall see, into the relation of subconscious processes to conscious processes. One would expect that psychiatrists seeking to determine the mechanism of hallucinations of the insane would begin with artificial hallucinations and that psychologists interested in the problems of imagery would do the same.)

An examination of the content of the hallucinations thus induced reveals that they may be: (a) Visual memories, *i.e.* reproductions of past visual experiences; (b) visualized memories of past experiences that were not visual (*e.g.* of knowledge gained in other ways); (c) pure fabrications showing constructive imagination which may represent past thoughts (repressed or not), wishes, forebodings, etc., or attempts to solve problems and doubts, answer questions, etc. Further, when the visualizations are of persons *the thoughts of the vision-personality* (*i.e.* those underlying the hallucinations) *may emerge into consciousness*; and I may mention in passing that the *affect* pertaining to these thoughts or to elements in the hallucination often wells up into consciousness. (This is a phenomenon of importance bearing on the problem of moods or affectivity.)

More important for our present study, the behaviour of these hallucinations shows that an active process is going on that is not in awareness (*i.e.* is subconscious), but is inducing the visualization (*e.g.* when the hallucination has the action of a cinema picture, or represents in visual imagery past thoughts, and is not simply a reproduction or memory of a past visual experience). If we can find out what sort of a process it is, identify it, and discover its relation to the hallucination we shall advance a step towards solving the problem of hallucinations in the insane.

## 2. Hypnotic Methods (Coconscious Images).

There is another class of phenomena which I have called *coconscious* images. The finding of these came from hypnotic methods, *i.e.* introspection in hypnosis. They are as extraordinary as they are interesting, but I do not expect you to believe them until you have confirmed their reality by your own observations. My own findings have, however,

been confirmed by Dr G. A. Waterman in a case of his own<sup>1</sup>. I have found them, according to the evidence of the subjects, in four cases including that of Dr Waterman, who gave me an opportunity to examine his case.

Coconscious visual images may be defined as psychical images of which the individual is not aware and therefore which are subconscious.

They occur as:

1. Phenomena of suggested post-hypnotic acts.
2. After phenomena of dreams.
3. After phenomena of repressed thoughts.
4. Phenomena of moods (depressed and exalted states).
5. Phenomena of perseveration of previous emotional complexes (mental systems).
6. Phenomena in the mechanism of hallucinations.

Because of the behaviour of the phenomena in the last class they belong to this study. As phenomena of suggested post-hypnotic acts they permit of experimental induction and study. I have found that each step in such an act (in the cases studied) is preceded or accompanied by a subconscious image or picture corresponding to one of the elements of the act performed or to be performed. Such images occurring with repressed thoughts not in awareness are interesting from a psychological and psychopathological point of view. Sometimes these subconscious pictures are accompanied by an affect which alone emerges into consciousness, as with artificial hallucinations, and apparently determines the conscious mood<sup>2</sup>.

Now the point I am coming to is this: occasionally I have found that *one or more images emerge into consciousness and become a hallucination.*

This observation led me to postulate a theory of visual hallucinations, namely, that in certain instances at least *they were the emergence into awareness of imagery belonging to subconscious thought—the same sort of imagery that occurs in conscious thought.*

Auditory hallucinations, similarly, are the emergence of subconscious verbal 'images,' i.e. sounds of words used in subconscious inarticulate thought or internal speech.

<sup>1</sup> For a study of these phenomena see article by the writer, "Coconscious Images," *Journal Abnormal Psychology*, XII, No. 5, December 1917. (A report of Dr Waterman's observation is included in this article.) See also *The Unconscious*; Index, "Coconscious Images."

<sup>2</sup> I have discussed this important phenomenon in *The Unconscious*, chaps. XII, XIII, XVII; see also *The Dissociation of a Personality* for numerous observations.

### 3. Subconscious Script.

It remained, however, to prove this by a method not dependent upon hypnotic introspection and memory but by one that would reveal the subconscious thought and synchronously the corresponding hallucinatory images after emergence into consciousness; and the correlation of the two. For this purpose the following procedure was devised: (*a*) to induce experimentally subconscious processes; (*b*) to 'tap' the subconscious process while in progress and obtain physical records of it; (*c*) if any hallucinations occurred synchronously to obtain a detailed description of the same; (*d*) to correlate by comparison if possible the imagery of the hallucination with the ideas expressed in the written record of the subconscious process; and (*e*) to obtain immediate evidence by subconscious introspection of the relation, if any, between the elements of the subconscious process and the imagery of the hallucination and the mechanism of the same.

The technique of 'tapping' the subconscious process suited to the experiments and obtaining physical records of the same is subconscious writing, commonly called 'automatic writing.' (Here I may again venture a parenthetical remark: it is strange that psychologists and those engaged in psycho-pathological work have so utterly neglected the study of subconscious writing, both as a phenomenon and a mode of investigating the nature and potentialities of processes outside of awareness, and, I may add, of the dynamic structure and mechanism of the mind. The mechanism of this kind of writing still needs to be worked out as well as the relation of the process to the personal consciousness<sup>1</sup>.)

To carry out the proposed plan of investigation it was necessary to have a subject who both experiences hallucinations and can produce automatic (subconscious) script without awareness of what the hand is writing. (The latter is necessary because some automatic writers become aware of the content of the script as it is being written although it is subconsciously written in that they are not aware of what will be produced and do not voluntarily produce it.) I fortunately have a subject who answers these two conditions and who has been under my observation for about a year. She came to me as a patient for other reasons. I have therefore an intimate knowledge of her character and personality and can vouch for the bona fide nature of the phenomena themselves. She comes of a good, and at one time wealthy, American family and as

<sup>1</sup> This important phenomenon has been left to those interested in Psychical Research and spiritualism, who are concerned solely with the content of the writing and not with its psychology.

a young girl she was, I judge, rather luxuriously brought up: she possesses considerable artistic talent with pencil and brush and has an ambition to develop her voice for dramatic purposes. This is the ambition of her life. These facts are pertinent to an understanding of the content of the script and the hallucinations obtained. She produces automatic script with remarkable facility and has written what would make several volumes in this way, including two or three of fiction and a good deal of verse.

Now on several occasions she had casually remarked that often while she was automatically writing she had experienced visualizations and other hallucinatory phenomena which afterwards she discovered corresponded to the content of the script. Being interested in other aspects of the case I had merely made a note of the fact at the time without further attention. Later, when I took up the question of hallucinations for study it occurred to me at once that here I had just the subject I wanted at hand. The conditions of the experiments were arranged as follows:

The head of the subject was covered with an opaque cloth to prevent her seeing the script as it was being written automatically by her hand. A pencil was then put into her hand which rested conveniently on a sheet of paper placed on a writing tablet by her side. She was then told to write automatically regarding some subject which I designated in general terms in each experiment: for instance, a memory of some remembered episode in her life, a memory of such an episode but one forgotten by the subject; a fantasy; a fabrication requiring constructive imagination, etc. The object of diversifying the subjects was to obtain products of different kinds of subconscious work (memory, dream-like fantasy, imagination, etc.). If, during the experiment, while the hand was writing, a hallucination developed, the subject was directed to indicate the fact the moment she saw it by exclaiming 'picture.' Thereupon I made a mark on the script at the point where the picture appeared. Likewise the moment the hallucination disappeared the subject exclaimed, as directed, 'gone,' and the point was similarly marked on the script. Thus those words of the script which were written during the occurrence of any given hallucination could be identified and could be compared with the latter and any correlation of the written ideas and the hallucinatory images noted.

In some cases as soon as the hallucination appeared the subject was required to describe orally the 'picture' in detail. This description was taken down by me verbatim. Two things, be it noted, were thus being



done by the subject at one and the same time; namely, writing with the hand one thing, of which she was not consciously aware, and describing orally and consciously another thing—two entirely different processes, one subconscious and the other conscious.

In other experiments the subject was not required to describe the details of the hallucination until after it had disappeared, but only to indicate its beginning and ending and its general character, such as of a person, or place, or thing—"a ship on the ocean"; "a street in a city," etc. As soon as it disappeared the writing was interrupted and the subject was required, while the memory was fresh, to describe the details of the hallucination. This having been done the writing was resumed and this procedure continued until the script was finished, when, as it happened, the hallucination always ceased. This method was found to be the most practical for reasons I will not go into because it would involve a lengthy discussion of the principles underlying the phenomena of subconscious writing.

After the observation was complete, the script and the hallucination as recorded were compared and for this purpose arranged in parallel columns. Thus any correlations between the imagery of a hallucination and the synchronously written script could easily be noted.

Finally, after each observation the method of *subconscious introspection* was used to elicit such evidence as might be obtainable as to what occurred subconsciously during the writing of the script and the hallucination, *i.e.* what was the character of the subconscious process that produced the script; what (if psychological) was its content; what, if any, psychical elements (such as images) of which the subject was not consciously aware were present; and what, if any, light could be thrown by subconscious introspection upon the relation of the subconscious process to the hallucination? Very positive introspective testimony as to the source of the imagery of the hallucinations and the relation of those images to the subconscious process was thus elicited. Its credibility must be judged according to the value assigned to the method. A summary of this evidence will be reported in its proper place, after the various scripts and their accompanying hallucinations have been given.

Before giving the results of the experiments the following facts in the psychological history of the case will enable you to understand the rather fantastic content of the text of some of the script and imagery. The subject had at a previous time exhibited the phenomenon of double personality and for this reason had been sent to me for study and readjustment. This phase of the case had been recovered from at the

time when the experiments were undertaken. During this previous phase one of the personalities called 'Juliana' had imagined as a fantasy that she was the reincarnated soul of a Spanish peasant girl of the thirteenth century and, after the fashion of secondary coconscious personalities of spiritualistic mediums (as in Flournoy's case of 'Hélène Smith'), imagined that she remembered her previous life as such a peasant. A most elaborate and extravagant romance of the thirteenth century had thus been fabricated beginning with her early girlhood as a rustic peasant and ending in her death in old age after many adventures as a street singer and finally as a great artist with a wonderful voice, having sung and danced before the King's Court and great audiences, one of which was gathered in the Coliseum in Rome. The genesis of this fantasy could be traced, I think, to the day dreams of the subject as a young girl and later to dreams under the influence of morphine during a serious illness. But as elements in it could be recognized, as motivating factors, her life's aspirations. As Juliana, a secondary coconscious personality and also an alternating personality (to whom 'Susie' used to change from time to time), she would play the part seriously and honestly of a Spanish girl, spoke broken English with a foreign accent, and also a supposititious Spanish dialect of the thirteenth century which, of course, was only a neologism (nicknamed by me the 'lingo'), and acted the part well.

After reintegration the subject consciously and coconsciously remembered in complete detail the so-called 'Spanish fantasy,' and, according to well known principles, the conserved subconscious systems could be 'tapped' and made to a degree, as artifacts, to manifest themselves as more or less temporarily dissociated autonomous systems.

In the cure, that is the reintegration of the two personalities into one normal one, the belief in all this fantasy, previously strongly held by Juliana and accepted by the other personality, was, of course, destroyed.

It need only be added that at the time when these observations were undertaken the subject, owing to reversals in the family fortunes, was obliged to earn her living and was employed in a large department store in which she rendered excellent service as a saleswoman. She regarded this, however, as only temporary, hoping later to achieve the object of her life-long ambition, to cultivate her voice for a career upon the stage.

I will now give the results of the experiments, not in the order in which they were made, but classified according to the type of content of the script and hallucination.

A. SUBCONSCIOUS (AUTOMATIC) WRITING ACCOMPANIED  
BY VISUAL HALLUCINATIONS.

*Observation I.* In this observation both the script and the hallucination record a *memory* of an episode which occurred two or three years ago when the subject, as I have explained, exhibited the secondary personality of 'Juliana.' The subject now consciously remembers the episode here described at the University. (Susie is the name of the normal personality; 'Dr Jones' is assistant professor of philosophy.) To conceal the identity of the subject fictitious names, including that of the University, have been substituted throughout.

I. A Memory of a Previous Episode in  
the Subject's Life.

The subject was directed to write automatically an account of some episode in her life making the selection herself subconsciously. (Of course neither I nor the subject had any suspicion of what it would be.)

SCRIPT: "I was at Harvard [<sup>1</sup>*University one day with Dr Jones when I changed into Juliana for Dean Smith and he*] was pleased with me.  
<sup>2</sup>  
I went [*through all sorts of gestures as Juliana and*] I spoke 'lingo' for  
<sup>3</sup>  
[*the men and they seemed very much interested and the Dean never*] took his eyes off Juliana."

While the hand was writing this script automatically without awareness on the part of the subject, the first 'picture' (hallucination) appeared when the word "university" was written and continued until the word "he" was written, when it vanished. This is indicated in the text by the words in italics enclosed in brackets and designated by the number 1. Similarly the second picture appeared synchronously with the word "through," and ended after the writing of the words "Juliana and"; the third picture appeared with "the men" and ended after "never."

The hallucination (as described and taken down verbatim by me) and the script were now compared to see (a) if and to what extent its images were synchronized with the 'ideas' contained in the script, and (b) if the images corresponded to and represented these ideas thus synchronously expressed in the writing after the manner of conscious imagery.

For clarity the script and the hallucination are arranged below in

parallel columns, each 'picture' being set off against those portions of the script that were written during its occurrence.

(I trust this explanation of the phenomena obtained in this experiment and of the form in which they are now presented will be sufficient for a comprehension of all the succeeding observations that follow, as the same plan was adhered to in each.)

## SCRIPT

1. I was at Harvard [*University one day with Dr Jones when I changed into Juliana for Dean Smith and he*] was pleased with me.

2. I went [*through all sorts of gestures as Juliana and*]

3. I spoke 'lingo' for [*the men and they seemed very much interested and the Dean never*] took his eyes off of Juliana.

## HALLUCINATION

I see Harvard University. The steps going up and the brown stones and the whole front of the building. I see myself as Susie going up the steps and into the building and I go down the hall to Dr Jones' office. Dr Jones is there and Dean Smith. They rise and shake hands and then sit down. I sit down as Susie and I see myself sitting in a chair and I turn into Juliana. I rise again as Juliana and shake hands again. They seem pleased. (The whole vision is like a movie.)

I see myself sitting in Dr Jones' office as Juliana and I am going through all sorts of funny gestures like a foreigner. They laugh. (I cannot hear them.)

I see myself as Juliana and I am talking the 'lingo'—(I can hear the words—but cannot tell what they are). I can hear Dr Jones' voice as if he is saying this is "an interesting phase" (the exact words).

If you will take the pains to examine carefully these results and compare the script with the corresponding hallucinations you will note several things:

1. At the moment of the occurrence of the subconscious writing of the words "Harvard University," and the words describing each succeeding step of the original episode, a visualization, or hallucination, or image—call it what you will—corresponding to and representing the ideas or thoughts expressed by the subconsciously written words developed in consciousness. I am particular to express it this way because it must not be forgotten that all we have are certain physical marks (writing) on paper (of which the subject, let it also be not forgotten, was unaware) and a described hallucination. But if we accept the doctrine that automatic script is written by actual coconscious thoughts not in awareness rather than by purely physiological processes<sup>1</sup> we may with equal accuracy express the facts and avoid pedanticism by the formula: *at the moment of the occurrence of a subconscious memory or*

<sup>1</sup> I am not certain that it makes any difference in our conclusions whether the writing is done by physical or psychical processes. The point is the correlation of imagery with a subconscious process that is equivalent to a thought and corresponds to the image or images.



*thought (not in awareness) of Harvard University and of each succeeding step of the original episode a visualization corresponding to and representing that thought-memory appears in conscious awareness.*

2. These visualizations resemble and perhaps we may say simulate or are identical with the ordinary visualizations of conscious thought although they may be richer<sup>1</sup> in detail and more vivid.

She subconsciously thinks of being at Harvard University, as had happened on a certain occasion, and almost at once she experiences not only images representing a building at Harvard, but also images of herself in movement, walking up the steps, into the building and down the corridor to 'Dr Jones' room, as she did in the original episode. And so on with the remainder of the episode described in the script.

3. The visualization (hallucination) was much richer in detail than the description of the episode given in the script. I shall come back to this fact and discuss it more fully later. I will merely point out now that this is also true of the imagery of conscious thought and particularly of written thought. When I write "I took such a train for New York," with the thought of having taken the train I may have an elaborate imagery of the Boston station of the N.Y. and N.H.R.R. crowded with bustling people, of entering the gate with other passengers, of the long train of cars standing by the platform of the station, etc. More or less of all this I may have and do as I write it, according as my mind dwells on the incident and gives time for the thoughts and images to develop. And yet I only precisely think and still more only write, "I took a train." A good visualizer has very rich imagery for very simply expressed thoughts.

4. A moment elapses after the script begins to describe the incident *before* the correlated image develops. For instance, the image of the University building does not develop until after the four words "I was at Harvard," were written. This slight delay in the development of the hallucination is of considerable significance and I will come back to it later after the results of the other experiments are given. We shall find better examples of it and also of the correlation of script and imagery in the more elaborate scripts and hallucinations. In fact I begin with this simple type of script and imagery that the main principle involved in all the experiments may be first clearly understood.

5. Finally I would point out that the three 'pictures' in this experi-

<sup>1</sup> Although this qualification is true by comparison with the imagery of the average run of individuals it may be doubted if it is true by comparison with the imagery of some persons who are extraordinarily vivid and elaborate visualizers.

ment can be recognized easily as continuations of the same theme. But although this was always the case, we shall find that with most of the other hallucinations there is no obvious continuity to the pictures. The scenes shift as in a dream without apparent relation to one another. The significant fact is that *the continuity will be found in the subconsciously written script* without which the varying hallucinations would not seem to be related to one another and could not be understood or interpreted as manifestations of one and the same theme.

All these points should be borne in mind when studying the phenomena of the other experiments.

*Observation II.* (This was the first and a preliminary experiment to determine the best technique.) The subject was directed to write subconsciously a fabricated story constructed out of her former so-called 'Spanish dreams'—those of the Juliana system which had as a second personality conceived itself to be the reincarnated soul of a Spanish peasant girl and had created an elaborate fantasy of a previous life in Spain in the thirteenth century. The scenes and personages incorporated in the script had been often previously imagined. The images of the hallucination were therefore reproductions of former imagery. The image of Juliana, for instance, was reproduced exactly as it had always been visualized in the Spanish fantasies. (See Observation IV for a drawing of Juliana and the dancing scene.) The visual images were accompanied by a number of auditory 'images' and also by somatic sensations and feelings. These latter were the same as those which had always been associated with the conception of herself as a Spanish girl. Hence the script begins "I feel I am Spanish through and through."

In this preliminary experiment the scenes of the hallucination were described in detail from memory after the completion of the script. In thus recalling the scenes the imagery was revived again and described from the reproduction. The images, both as they occurred in the hallucination and as revived, were said to be very vivid, more vivid than when experienced in the original fantasies, and were likened to the pictures of the 'movies.'

## II. The Spanish Fantasy.

SCRIPT: "I feel I am [<sup>1</sup>*Spanish*] through and through. [<sup>2</sup>*As I paddled barefooted through brooks*] and carried [<sup>3</sup>*jugs of water upon a yoke and danced barefooted before the king of Spain and his Court—Cortes*]. Also when

<sup>5</sup>  
[I walked to early mass at the village church or mission at a village called in  
<sup>7</sup>  
my time Medesa]. And of [Father Brazado, the priest who discovered my  
<sup>8</sup>  
voice]. [I have a voice. I shall always believe I am a soul."']

## SCRIPT

1. I feel I am *Spanish*  
through and through.

2. As I paddled bare-  
footed through brooks

3. and carried jugs of  
water upon a yoke

4. and danced barefooted  
before the King of Spain  
and his Court—Cortes.

5. Also when I walk to  
early mass at the village  
church or mission

6. at a village called in  
my time Medesa.

7. And of Father Bra-  
zado, the priest who dis-  
covered my voice.

## HALLUCINATION

Indicated by certain strong feelings and somatic sen-  
sations which emerged in association with the image of  
Juliana, a revival of a fantasy of herself in a previous  
existence as a *Spanish peasant of the thirteenth century*.

A brook. Juliana is walking through it barefooted with  
her skirt doubled up in front but falling behind, showing  
her petticoat of a very coarse cloth, such as a peasant  
might wear. (Here the subject remarks, it is "a very  
pretty picture.")

[Shift]<sup>1</sup>

Juliana has water jugs on a yoke on her neck carrying  
them from a fountain in the village. [It is a village not  
a city because she sees earth around the fountain.] ("I  
feel as if the image that is Juliana is a part of me.")

[Shift]

Juliana dressed in dancing costume—marble floors—  
draperies—flickering lights. She is dancing as Juliana  
has danced in real life. The scene is such as if it is a  
King's Court—a lot of people there—men as well as the  
women are dressed in long robes. That is the men do not  
wear knee breeches, etc. (The costumes are such as are  
represented in pictures of medieval times.)

[Shift]

A road. At the end of the road a little church. A sort  
of white stucco mission church. Juliana's back is towards  
me. She is walking down the road barefooted going to the  
church. The whole is as plain as a motion picture. I can  
see the grain waving in the adjoining fields. (I have the  
feeling as if she is lazy and does not want to go to  
church.)

[Shift]

A sort of square. I can see her uncle Salvator. There  
is a tent propped up over a lot of vegetables exposed in  
the market place. A lot of foreign looking women are  
walking about. There is a crowd.

[Shift]

A priest—(a man just as vivid as I can see you)  
medium height—fat—big fat stomach, dressed in a long  
black robe. Around his waist is tied a cord, a funny  
twisted cord like nothing I have seen. (Here she imi-  
tates with her fingers the twisting of the cord.) He has a

<sup>1</sup> Note the shifting of the scene after each hallucination without apparent continuity of action which is to be found only in the theme of the script, that is, in the subconscious process. The exact points in the script where two of the hallucinatory scenes ended are not quite clear in my record, so that the time interval between them and the next ones is not apparent.

grayish beard and is walking down a roadway. Fields on each side. Juliana, with thick black hair flying behind as if the air is blowing it, short skirts, bare legs, is raking in the fields. I can hear her *singing* in the Spanish 'lingo.'

[Shift]

8. *I have a voice.*

Juliana *vividly singing* in a sort of arena like the Coliseum in Rome. There is a big crowd of heads in the Coliseum. I can hear a voice singing in the 'lingo.'

On examination of the details of the script and the synchronously occurring hallucinatory imagery, we see that the latter is composed of just such images as the thought contained in the script would normally incorporate. The subconscious writes "As I paddled barefooted through brooks," and at that moment the subject consciously sees an hallucinatory Juliana walking barefooted through a brook, her clothes made of coarse cloth tucked up in front, etc. The picture of Juliana was identical with previously imagined pictures of herself as that personality.

The subconscious writes "and carry jugs of water upon a yoke," and thereupon the scene shifts and the subject sees an hallucination of herself as Juliana carrying water jugs on a yoke on her neck from a fountain in a village.

The subconscious writes "and danced barefooted before the King of Spain and his Court" (a scene from a former fantasy) and straightway the picture shifts again and the subject sees an hallucination of just such a scene at an imaginary Spanish Court. (This dancing scene had been previously constructed in subconscious fantasy and several times was reproduced in the course of this and other observations. (See Observation IV.)

The subconscious writes, "also when I walk to early mass at the village church or mission," and the scene of the hallucination shifts, a little church appears at the end of the road and she sees herself as Juliana walking down the road, etc. The imagery, as in all the other scenes, perfectly corresponds to the thought expressed in the script and is precisely such as such a thought would incorporate bearing in mind the Spanish setting and peasant personality. And so on with the succeeding three scenes. In her previous dissociated personality she had frequently constructed these same scenes with the same imagery which appeared in corresponding hallucinations. The scene in the Coliseum, for instance, she had previously constructed and had woven it into her fantasy of her previous thirteenth century existence. (Before these experiments were undertaken I had already heard this scene described in vivid detail.)



The richness of the imagery in each scene should be noted. When, for instance, the script speaks of the priest "Father Brazado" the corresponding image is not simply of a figure or face, or even a priest, but of a priest portrayed as a personality with particular physical characteristics. It is a piece of character drawing done much as would be done in a play or novel. This character is also given a setting rich in local colour comprising a roadway and fields in which Juliana appears as a peasant girl at work with her rake. Now all this is derived from a previous fantasy which had been constructed as a dream-like work of fiction. The imagery, in other words, includes and is largely constructed out of images belonging to associated ideas as happens in normal conscious ideation. One thinks of a certain person, and images of that person in a particular setting of previous experience arise. Similarly when the script states, "I have a voice," the image is of a particular experience when in fantasy she sang in the Coliseum to a crowded audience. This experience is a pseudo-memory which arises subconsciously.

This richness in detail and extensiveness of the imagery of a hallucination, transcending the verbal limits of the script, is noticeable in all the observations and will be discussed later with the evidence from subconscious introspection. As already stated this evidence was elicited after each observation as part of the technique, but it will be more advantageous to consider all this evidence together.

*Observation III.* For the following experiment the subject was instructed a day or two in advance to be prepared to write automatically at the next visit a fabrication in the form of a story or anything else of an imaginative character on any subject she chose *subconsciously* to select, but something distinct from the Spanish dreams of Juliana; that is, something that would be original and not a reproduction of former fabrications. Thus a chance for subconscious incubation was given. The result turned out to be a poetical (?) glorification of the talents which she has always felt consciously and particularly subconsciously, she possessed, but to which she had been unable to give expression owing to the circumstances of her life. The hallucinations were allegorical in form. It was interesting to watch the hand erasing and altering the phraseology as in conscious composing. There was evident difficulty owing to not being able to see the writing and therefore having to keep the written words in mind.

## III. A Poetical Glorification of Her Own Talents.

SCRIPT: "Open wide thy treasure chest ladened with <sup>1</sup>*gifts so rare.*  
*And sing thy song of rapture of beauteous skies so fair.*

<sup>2</sup>  
 Thy tones will fall as *gems that fell from founts of gold*  
*And the echo of thy song shall die away like strains from lutes*  
*of gold.*

<sup>3</sup>  
 Pandora's box is poor compared with all *I hold*  
*Within, and appears as a box of snuff to the one*  
*Who knows, who sees, and who can tell*  
*Glorious [picture grows larger] splendor of skies of roseate hues,*  
*And the heavenly grandeur of azure."*

## SCRIPT

1. Open wide thy treasure chest ladened with *gifts so rare.*  
*And sing thy song of rapture of beauteous skies so fair.*

2. Thy tones will fall as *gems that fell from founts of gold*  
*And the echo of thy song shall die away like strains from lutes of gold.*

## HALLUCINATION

A big chest rises up in my mind—it is heavily carved—a gorgeous thing. At first it is closed and then it slowly opens. As it opens I see that there are in it beautiful strings of *pearls* and red and white *roses*. I see *vials like cut glass flagons*, and instead of seeing the liquid perfume in the flagons there comes out a sort of vaporous cloud that is perfumed, because I can actually *smell* it. And on the edges of this chest are beautiful birds, like pure white doves. They are alive and it seems as if I hear them *cooing* as in the spring time. I actually *hear* them coo. Then finally, a foggy vapour seems to cover the whole, to swallow it up, and it disappears. (It all seems to symbolize beautiful things.)

I see a *fountain*. It is beautiful. It is of green malachite. The base of this beautiful fountain is formed of funny little creatures that seem to be half animal and half human. They have the faces of goats, with horns and tails and hoofs. They seem like human beings and yet they are goats. (It seems as if I have seen such things before—such as might be in *Midsummer Night's Dream*.) There are four of these figures holding up a big bowl, that of the fountain, which is about five feet tall. It seems to be located on the edge of a wood. In the background I can see light coming through the foliage. Flowing out of this fountain the beautiful *crystal water* falls over the edge into a basin at the base. And beautiful *gems—rubies, emeralds, etc. fall out over the edge along with the water*, as if they were bubbling out of the bowl, and falling into the basin they disappear. Around the basin at the base were *lutes, and harps—golden instruments*. I can hear beautiful *soft music inwardly*. (I have often heard such inward music before. I have often got out of bed to dance to this inner music.) *The music seems to come from the instruments* although nobody plays upon them. It is very *low, dim, soft music*. (The vision seems to symbolize the natural gifts I have within me.)

3. Pandora's box is poor compared with all I hold

*Within, and appears as a box of snuff to the one*

*Who knows, who sees, and who can tell*

*Glorious [picture grows larger] splendour of skies of roseate hues,*

*And the heavenly grandeur of azure.*

First I see a picture of a woman angel. She is holding a *jewel box* in her hand and butterflies are flying out of it. It seems to diminish in size until it gets real tiny. While she is holding it and as it becomes small, *rays of light* shoot up over the whole and shut out the angel.

*These rays turn into a beautiful sky.* [This was when the vision grew larger, as indicated in the script.] The sky is *blue* and *pink*. (It is very beautiful.) Then clouds form in the sky and then they break and show the *pink* colour through.

The correlation of the several elements of the hallucinations with the *synchronously* written words is strikingly manifest.

The hand writes "Open wide thy treasure chest—laden with gifts so rare," and in a moment or two she visualizes a treasure chest slowly opening and disclosing gifts of rare value.

The script exhorts her to sing a song of rapture, and at the same time in the allegorical visual and auditory hallucinations she both sees and hears beautiful white doves cooing as in the springtime.

The script compares the tones (or words) of her song to gems falling from a fount of gold, and she straightway visualizes a beautiful fountain from which gems bubble out along with the crystal clear water.

The script compares her song (*i.e.* musical voice on which is centred her ambition) to the strains of golden lutes, whereupon synchronously she visualizes golden lutes and other golden instruments lying at the base of the fountain, and she hears "beautiful soft music inwardly" coming, as it seemed, from the instruments.

The script compares the gifts she holds within herself to those Pandora possessed in her box, to the disparagement of poor Pandora (of whom and the contents of her box by the way, her knowledge is very inaccurate<sup>1</sup>), and correspondingly she sees a vision of a "woman angel" (the facsimile of a picture in her possession which she, as it later transpired, imagined was that of Pandora) holding a jewel box in her hand.

The script emphasizes her own marvellous knowledge and gift to describe in song the splendour of roseate skies and the grandeur of the heavenly azure, in comparison with the poor little talents belonging to Pandora and contained in her box, and straightway in the vision only butterflies come out of the box which diminishes to a tiny size, and Pandora and the box are eclipsed by splendid rays of light which turn into a beautiful sky of pink and blue.

Another point worth noting is the wealth of imagery of the hallucina-

<sup>1</sup> As I later determined.

tions. If this imagery may be interpreted to represent symbolically the meaning of the script it approaches allegory with free use of symbolisms and analogies. For instance: her own personality laden with rare inborn gifts, or talents, is likened to and symbolized by a treasure chest filled with gifts of pearls, roses, cut-glass flagons, etc. As she exhorts herself to display her own gifts so she sees the treasure chest open and display its contents, and, somewhat astray in her knowledge of mythology and the contents of Pandora's box (as I afterwards discovered) she compares the gifts contained within herself to those of Pandora, to the disparagement of that mythological lady. Likewise the rich imagery of the fountain with its gems bubbling out with crystal water. All this reminds us of conscious imagery in composition of poetry, oratory and descriptive writing.

*Observation IV.* In this Observation the script records a subconscious memory of a consciously forgotten episode; that is a dream of which the subject has no remembrance nor of the circumstances excepting that during a severe illness years ago and while under the influence of morphine she had a dream of some sort of Spanish character. This was before the break-up into a double personality and the evolution of 'Juliana.' Indeed it was out of the fantasies of such night and day dreams, as I interpret the case, that the Spanish personality later became constructed. The hallucination is particularly interesting as it represents a dream within a dream, with corresponding shifting scenes of which the continuity is to be found in the subconscious script. The hallucination was described orally while the hand was writing the script.

#### IV. A Subconscious Memory of a Forgotten Dream.

SCRIPT: "Once when I was ill in the <sup>1</sup>*South I wished I was a strong woman; I wished I was a Spanish girl* and this is what I dreamed:—that I was a Spanish <sup>2</sup>*maiden of rare beauty and charm*, and then I saw her <sup>3</sup>*sitting on a stump and I seemed to see her dreaming.* <sup>4</sup>*I see her in a palace where there is soft music and there seems to be grapes and flowers and beautiful pictures and oil urns of coloured lights."*

<sup>1</sup> The exact moment of emergence of the last two pictures (3 and 4) by an oversight was not noted on the script. They are here given approximately.



## SCRIPT

Once when I was ill in the South I wished I was a strong woman; I wished I was a Spanish girl and this is what I dreamed:

[Dream of Susie]

that I was a Spanish maiden of rare beauty and charm

and then I saw her sitting on a stump of a tree and I seemed to see her day-dreaming.

[Dream of Juliana]

I see her in a palace where there is soft music and there seems to be grapes and flowers and beautiful pictures and oil urns of coloured lights.

## HALLUCINATION

Described orally while the hand was writing

I see myself in bed. I'm sick. I see a room—a bed in it, a brass bed. I am real weak. I prop myself up on a pillow. I seem to be like I was dreaming—I see myself lying back on the pillow. Now I am asleep.

[Shift]

I see Juliana going into the woods. She is plump with poor clothes—her hair is hanging down her back—she is barefooted. [Comment after the cessation of the hallucination; "She was very pretty."]

[Shift]

Juliana is sitting on a log. She seems to be dreaming. As I see her I seem to see her dream.

[Shift]

I see this peasant girl in a beautiful palace—she has beautiful robes on—there is beautiful statuary in the palace—a lot of gaiety around her—a lot of people as in a court—soft music—I hear it—and a lot of light coloured light from urns and lots of fruit—beautiful marble mosaic floors—the girl is dancing.

After this experiment the subject again visualized the 'pictures' of Juliana sitting on the stump of a tree and the scene of the palace and drew the following illustrations (Figs. 1 and 2) from the visions which she actually saw as if they were real. The mechanism of this revisualization was found on examination to be very similar to that of the production of a crystal vision. There was, also, as was claimed, a coconscious wish ("a great desire") to have the coconscious images emerge into consciousness so as to be drawn.

The dancing scene at Court had been frequently visualized and was therefore an already organized construction. She had little more than to think intensely of it coconsciously to have it reappear. It was a repetition of scene 4, obs. II.

The script begins to tell of an illness which the subject suffered a good many years ago when living in the South and after seven words are written an image of herself ill in bed, in the very same brass bedstead and in the very same room in which she had been ill appears in consciousness. (It is a visualized memory for on seeing the vision she recollects the illness, the room and the bedstead.) The whole hallucination is composed of just such images as would accompany the recollection of such an episode as one would experience when one recalls a particularly serious illness that one has suffered in a particular place. She had been

prostrated at the time, as she well remembers, and the hallucination portrays her as weak in body and the script described her thought as wishing to be strong, to be in fact the strong peasant Spanish girl whom



Fig. 1. Juliana drawn by the subject from a hallucination.

in her day-dreaming she had fabricated as a fantasy; and so she goes to sleep and dreams the fulfilment of this wish.

She dreams (according to the script—whether true or not does not

matter, for it is only with the content of the subconscious process that is writing that we are concerned) she dreams, so the script goes on, that she is a Spanish maiden and the image of such a maiden of "rare beauty and charm" appears as a hallucination but in a particular setting of the woods. The figure is an image identical with that which she had often fabricated of the Spanish peasant Juliana and just such an image as the maiden of the script would in conscious thought evoke. The setting of the woods is not described in the script but, as has been pointed out,



Fig. 2. Juliana dancing before the king (drawn as in Fig. 1).

the imagery of a hallucination is always richer than the script and the testimony of the subconscious introspection affirmed that all the details of the hallucinations were elements in the subconscious process as we shall later see. Then, as the subconsciously written script described the maiden sitting on a stump of a tree, day-dreaming, straightway a corresponding image of Juliana emerges as a hallucination. (Let us never for one moment forget in studying these phenomena, that the subject was entirely unaware of the content of the script—of what the hand had written, and therefore whatever images pertained to and

emerged from the expressed ideas must have pertained to and emerged from a subconscious process, and, if the script was written by a subconscious process, such as the content of that script would require.)

The script declares that (subconsciously) she sees the imagery of the dream and this imagery emerges into consciousness as a hallucination of Juliana dancing before the King and his Court—a long previously organized fantasy.

Thus examined the imagery of the several shifting scenes of this hallucination is precisely such as the content of the script would require; if we are justified in defining that content as coconscious ideas, we may say such imagery as those coconscious ideas would contain.

*Observation V.* The chief interest in the next observation lies in the facts (*a*) that the script was motivated by anxiety and not by a wish and therefore the hallucination was not a wish fulfilment; and (*b*) that the emotions linked with the subconscious process (a memory) emerged into consciousness along with the images of the memory. The emotions involved were both anxiety and anger, but it would seem that anxiety was the dominant emotion of the subconscious system producing the script while anger was that which was felt most strongly at least by the subject while seeing the hallucination. Apparently during the original episode, of which the hallucination and script were a memory, both anger and anxiety were elements. For this observation, it should be said, the subject had been directed to write automatically a memory of some episode in her life of an anxious kind. Of course neither the subject nor I had any idea of what would be written.

The occasion referred to in the script and reproduced in the hallucination was one when the subject was in the clinic of the commercial establishment (where she was employed) to get her time card signed for the days she was absent on account of illness. The nurse must pass on such cases.

## V. Memory of an Anxious Episode.

### SCRIPT

"Yes, I am concerned if they will sign my time card and she is cold in her attitude towards me."

### HALLUCINATION

(Described orally and synchronously while the hand was writing)

I see the nurse sitting down at her desk talking to me in the clinic down at the store, and I seem to be perplexed about something, I don't know what. She turns her head and writes something on a card. (She was sort of haughty.)



[Oral comment by the subject:]

[Note: The script further claimed that she felt (subconsciously) while writing really *anxious* because it meant much to her if the card were not signed and her pay was 'docked.']

"A feeling of *doubt* and of being full of *fight* comes into my mind. . . . While seeing the hallucination I felt worried as if my word was doubted, as if I were put on a level with other girls who tell a lie whenever they open their mouths. . . . I had that feeling at the time."

Immediately after the observation was finished the following questionnaire was put to the subconscious system. The answers were written automatically without the subject's awareness of their content.

Q. "What were you concerned about?"

A. "Whether the nurse will put a D.D. [Don't dock] on my card."

Q. "Were you anxious?"

A. "Yes."

Q. "Was the conscious mind anxious?"

A. "No." [Here in reply to my question the subject said, *without knowing what the hand wrote*, that she was not consciously anxious at the time of seeing the hallucination but only resentful.]

Q. "Were you *really* anxious?"

A. "Yes, and it would mean something if I do not get it signed."

#### Temporal Relation between Script and Hallucination.

It is obvious that there are two possible interpretations of the relation between the script and the hallucinations in these observations. First, the hallucination may be secondary to and a product of the script producing process; or, second, the hallucination may be primary and the subconscious process may simply describe in the script an independent hallucination. The point is crucial: for if the second interpretation be the correct one the hallucination could well be the product of an independent and unrelated process. In favour of the first interpretation and against the second is the fact to which I have called attention, that the writing of a given script always began before the correlated images appeared in consciousness. A moment or two always elapsed after the idea began to be written before its hallucinatory image developed. This can easily be recognized by noting the point marked in the script of the emergence of the image. If the script simply described a primary and independent hallucination we should expect the latter to have appeared first and the descriptive writing of the imaged idea to follow later. But the reverse was the case.

Then again the script is never technically speaking a description of the hallucination (such as the subject herself gave when she experienced

it), but rather a theme in which the expressed ideas would normally have just such images as appeared in the corresponding hallucination.

Further evidence confirmative of the first interpretation was obtained by subconscious introspection—the next step in the investigation. The evidence of introspection was to the effect, as we shall see, that the subconscious process was primary and the hallucination secondary; and that the latter was due to the emergence into consciousness of images belonging to and first formed in the subconscious process.

#### Introspective Evidence from Self-Analysis by the Subconscious Process.

The next step in this study obviously was, as stated in the beginning, to learn what light, if any, the subconscious process itself could throw upon the relation between the images (hallucination) and the writing consciousness; and for this purpose to obtain a self-analysis based on *introspection by the subconscious process* that wrote the script. Such an introspection would be similar in every way to the conscious method commonly employed in psychological laboratory investigations. It would make use of retrospective memories of the content of the subconsciousness. Its value as evidence would depend like all introspection on the accuracy and completeness of subconscious introspection.

The technique in the present investigation consisted in presenting a carefully worded questionnaire to be answered by automatic script and followed often by a rigid cross-examination of the replies, care being taken to suggest no leads or theories.

Accordingly after each of the first four observations the subject was submitted to such an examination. The content of the subconscious process, whether or not it contained images and thoughts and, if so, whether or not such images were in any way related to those of the hallucination, or to the subconscious thoughts (if there were any) producing the script, of course could not be known to the personal consciousness, nor were the answers known until after the interrogation was finished. The self-analysis, introspection and replies were, therefore, necessarily subconscious.

#### (Observation I: Harvard University.)

The replies of the script following Observation I<sup>1</sup> (the scene at "Harvard University") are striking in that, without any suggestion of

<sup>1</sup> As here arranged the observations are not in the sequence in which they were actually made. This observation was the third following the "Treasure Chest" (No. 3).

any theory whatever on my part, or indication of any mechanism by which the hallucination might be formed, the script clearly and explicitly described the origin of the pictures or images in the subconscious process and their later emergence into consciousness as the hallucination. The only possible suggestion was in the question whether or not the pictures were in the subconscious mind 'also' as well as in the personal consciousness, as surely might well be the case, whatever the mechanism. For subconsciously there is awareness for all that which is in the personal attention. The question only related to a possible memory of a possible past experienced *fact*, not to an opinion or general idea, or other thought. The affirmative answer can scarcely be questioned in view of the fact that subconscious images are not a novel phenomenon, as I have recorded them in at least three other cases; and, secondly, in this case they were repeatedly described to me long before I undertook this investigation, and were then as well as in these observations, recorded under all sorts of conditions and relations and their behaviour correspondingly described, etc. They occurred, so it was testified, spontaneously as well as experimentally. *Furthermore these images had been already described in two preceding observations.* Specifically, the statements of the script in this observation were as follows:

"The thought" arises subconsciously first, "then the pictures [images] are completely formed" and "all is visualized" subconsciously. "*I visualize*," the script states, "*subconsciously the scene I am writing about just as I do consciously.*" [The significance of this sentence is that the subject visualized subconsciously one scene while consciously during the experiment the content of her thought was of a different order (the scene of the room, the experimenter, etc.). Hence the eruption of the former was an hallucination.] The images "are in the subconscious mind while writing and then they are shifted into the conscious until they become visions." "When set, so to speak, they are reflected into the conscious mind." "*It takes some time [a few seconds] for them to come into the conscious mind.*"

(Observation II: The Spanish Fantasy.)

A source of confusion and error in drawing conclusions lies in the fact that sometimes the script is written by a subconscious system (*e.g.* Juliana) differentiated from that from which the images are derived. Speaking *figuratively* there may be two or more 'layers' or 'strata' of subconscious systems underlying one another. The system that does the writing may then derive its images and thoughts from a deeper and

more comprehensive underlying layer or system out of which the writing system has become crystallized as a differentiated system. In such a case the images emerge into this differentiated system from the deeper system and therefore the former does not know their origin but simply describes their content or the thoughts which they picture and which accompany them. Where all comes from it does not know. This is analogous to conscious imagery and thought. I have observed many examples of this kind of phenomenon. The consequence is that when the special script-producing system is interrogated the replies are inadequate and indefinite for lack of precise knowledge. Unless this is borne in mind confusion may result. This was the case in Observation No. II. Practically all the precise information that could be given was that the "visions" originated in "a deeper source of thought" and *first appeared subconsciously* to the writing system. Then, secondly, the writing of the ideas represented by the images caused the images to emerge into consciousness as hallucinations. But however this may have been the essential point is that the images *first appeared subconsciously and then erupted into consciousness as the hallucination*.

This observation was the first made and only a preliminary one to determine whether any positive results were likely to be obtained, and, if so, what was the best method of experimentation. Hence it was rather superficial. The chief points brought out by the subconscious analysis were:

"The 'pictures' seem to form from what has been written but the personal consciousness is not aware of it."

"The visions originate in the deeper source of thought and then the writing of them causes the visions to conjure up in the mind of the consciousness that is describing [orally] the visions"; i.e. the "personal consciousness."

"The deeper source of thought, which writes, has while writing the ideas contained in the pictures; so much so that that is where the mystery lies."

I am impelled here to insist again, as I have frequently done, that there is no *the* subconscious or *the* unconscious. In the structure of the mind there are greater and lesser systems of potential and dynamic processes which may be motivated by the urge of one or more 'dispositions.' These systems play and interplay with one another; and any one or more without entering the awareness of the personal attention may function 'subconsciously.' The concept of an unconscious, of which we read much nowadays, *limited* to primitive instinctive processes, is



based on inadequate knowledge of subconscious phenomena and is therefore scientifically amateurish. Such concepts belong to philosophy and are bound to go the way of all systems of philosophy after having served their usefulness, even as do scientific theories based on incomplete knowledge.

(Observation III: The Treasure Chest.)

The pictures (images) were first formed in the part of the mind that was answering the questionnaire; "the part that wrote the lines had the pictures and they became visible to the one sitting at your side [the subject]." The process was claimed to be as follows: The thoughts expressed in the versification came subconsciously on the way to keep her appointment. These thoughts were put into verse later, only, during the experiment and while writing, but the images were there before the composition was arranged and the "poetry came from the images<sup>1</sup>." "The thoughts were there first; then when they were grouped together to form the poetry the visions appeared [to the consciousness of the subject] during the process of the writing"; *i.e.* while writing the script the images erupted into consciousness as the hallucinations. "It took a few seconds for the images to become realistic to the conscious mind."

The order was:

1. Subconscious thoughts.
2. Subconscious images.
3. Subconscious verse.
4. Emergence of the images as hallucinations.

*As to why the visions had more details than were described in the script*, it was explained that there were subconscious thoughts of all the details of the fountain, but "you cannot write all the details as a vision can be described." In other observations substantially the same explanation was given. Thus, in Observation VI it was stated that "there is a subconscious process that can create visions quicker than the process of writing." This is emphasized by the fact that some visions are "mostly a memory," as was stated to be the case in one of the hallucinations of that observation. Then again (Observation IV) some hallucinations are recurrences or repetitions of subconsciously visualized scenes which have

<sup>1</sup> The whole process was quite complex, according to the explanation given. Although the thoughts and images of the verse were in the subconscious system that wrote the script of this observation (III), they did not originate there but in a 'deeper' and more comprehensive subconscious system which was answering the questionnaire. From this 'stratum' they invaded the system that was the author of the script and then the images erupted into consciousness as the hallucinations. This was the same order of affairs as occurred in the preceding observation (II). This same phenomenon, in kind, I had observed under other circumstances and in different forms.

been already constructed subconsciously in all their details and are later revived and flashed as a whole before the mind.

As to what suggested, *i.e.* motivated the thoughts of the verse, it was explained, "I am not self-centred but I do know I have a certain amount of talent, and I suppose it was because that thought or thoughts were uppermost in my mind."

(Observation IV: A Memory of Illness.)

In reply to the question, "What work was being done subconsciously during the hallucinations from which the drawings were made?" the script asserted:

"The subconscious mind of both Susie and Juliana was at work projecting into the conscious mind the visions of Juliana and the palace, and a great desire to have reproduced the vision in the deepest part of the mind [so that it could be drawn]. Yes, there were images that formed the people—all things were images." "The subconscious mind thought it all out, it creates the images; then constant thought pushes them into the conscious mind."

#### B. ARTIFICIALLY INDUCED VISUAL HALLUCINATIONS.

A series of observations were now carried out of a character *converse* to the preceding. Instead of producing primarily subconscious script with secondarily resulting correlated images (hallucinations), *artificial hallucinations were experimentally produced and the script employed to describe what if any subconscious 'thoughts' occurred during the hallucinations.* The method employed was that of fixing the attention by means of a crystal. No directions were given as to what would be seen in the crystal. That was left to chance.

•  
*Observation VI.* This series of three hallucinations is particularly instructive in that it shows the subconscious connection between hallucinations which apparently, as in dreams, have no obvious continuity by themselves. In the thoughts subconsciously written the connection is clearly shown especially in A and B of Hallucination 2, which I have consequently grouped together as one. The vision of her mother in a distant city suddenly without time interval shifts to a scene in Boston. The script enables the meaning of the shift to be understood. Subconsciously as the script explains, she wishes she could go home and see her mother once more sitting in the chair as she had often seen her and then after she has fulfilled this filial wish and obligation return to Boston

and complete her vocal training for the stage. This connected subconscious thought fills in the gap between the hallucinations A and B and explains their meaning.

Likewise there is a connection between all three hallucinations, although less explicit, and notwithstanding they were separate, interrupted observations, but made within a few minutes of each other. She has an aspiration to go upon the stage in opera and act a certain part, that of a Spanish girl in a scenario which she has thought out (Hallucination 1). To accomplish this it will be necessary to remain East and not only support herself by working but at the same time fit herself by study. But she also longs to see her mother (Hallucination 2). This conflict she has often mentioned. Her solution is, as she also has frequently stated, to return home temporarily and then return to the East. But she has expressed doubts if she would be allowed to return if she should go home. Her wished for solution is contained in A and B. In B the images are of herself singing by the side of her teacher, just such images as we should expect would be contained in the thought, though the hallucination is not a memory of a particular experience but a fabrication of an imagined general experience.

But to carry out her aspirations she needs a better paying position for temporary gain, so she applied for the position of assistant buyer and was called before the judges of the applicants. Hallucination 3 is a memory of that event.

## VI. Three Subconsciously Connected Hallucinations.

### HALLUCINATION 1

I see a *theatre stage*. I see a little bit of a body (myself) on this great big stage and I am dressed like a *Spanish girl* and I have my arms up *gesticulating as if singing*. I seem to be gay. I am dressed with a shawl and fringe.

### SCRIPT

I am thinking I would love to make *my appearance on the stage as a singer and impersonate Juliana as a Spanish girl*.

### HALLUCINATION 2

(A) I see my *mother sitting in a chair* and myself leaning over her kissing her.

[Shift]

(B) I am in a *studio by a grand piano*. The teacher is playing and *I am standing by his side singing*. I never saw the studio before. It is prettily furnished.

[Shift]

### SCRIPT

(A) I wish I could see my *mother sitting in her chair and then come back East and*

(B) *Go on with my vocal work*.

### HALLUCINATION 3

I see an *office down at the store* and I can see the *three men I talked to about the position of assistant buyer*: there are three chairs, a desk and myself. (I do not see the rest of the vision—not a complete picture like those I have seen.)

### SCRIPT

I am thinking of the day I was called to the *office of the judges* to select an assistant buyer to train for the position.

Following this observation the writing system was catechised and asked to explain why the hallucination of the studio showed more details than were contained in the automatic writing. The explanation given was that the content of hallucinations was often thought out subconsciously, first in detail before they were described, and that "there is a subconscious process that can create visions quicker than the process of writing." The vision of her mother was mostly a memory.

*Observation VII.* The next observation is extremely important in that, on the one hand, it illustrates the principle that script may be produced by more than one subconscious system, and, on the other, it shows a source of error that must be guarded against in such experiments. Otherwise we may be led astray by a failure to find a correlation between the hallucination and the script. In other words *a hallucination may emerge from or be determined by another system than that which is writing.* Furthermore it compels the conclusion that more than one subconscious system may actually function at one and the same time, and in this case three such systems. That script may be obtained from several distinct, different systems is well known, as is attested by the script obtained by mediums in claimed spiritistic communications. Of course psychological investigations have determined the same principle and the facts (*e.g.* Flournoy's classical observations in the case of Hélène Smith<sup>1</sup>. I need not mention numerous observations of my own illustrative of this point.) It may therefore be that the script obtained during a hallucination may show no correlation with the latter. In that case it may be that script can be obtained from another subconscious system which will contain very intimate correlations. This proved to be the case in this observation where the unrelated script first obtained was written by the 'Juliana system.' The hallucination consisted of a number of differing and shifting scenes. As the subject saw these scenes she sometimes laughed or commented on them. With this preamble I will now give the record of the observations, giving the hallucination and the corresponding script of the 'Juliana system' first.

## VII. Hallucination of the Fulfilment of an Aspiration.

Scenes: 1. Funeral (laughs)—2. Church—3. Cemetery (laughs)—4. New York—5. Theatre—6. Big buildings like an apartment house. (Given verbally and synchronously with the script of the 'Juliana system'.)

<sup>1</sup> "From India to the Planet Mars."



Each scene shifted to the next one, as in a movie, without an apparent time interval. The subject experienced the successive scenes of the hallucination while the script was being written by the 'Juliana system' and described each verbally in general terms, such as: "I see a funeral"—"Now I see a church"—"It has changed to a cemetery," etc. The six scenes were accordingly recorded as above. Immediately after the hallucination was completed and nothing further appeared, each scene was taken in its order and the subject while the memory was vivid described the details as given below.

## HALLUCINATION

Details of scenes given from memory immediately after their completion

1. I saw a *funeral*—a casket on a cart such as is used for soldiers with black drapery over it and a white cross of lilies on the top. I could see the petals. There were black robed priests carrying huge white candles and some little boys dressed in white following the casket and shaking incense burners—Streets paved with large rough cobble stones. ["It seems to be in Italy—seems foreign to me."] ["I had a feeling at the time the funeral was Juliana's. That is what made me laugh."]

2. Door of *cathedral*. I could see the tower and on top of it a cross. The funeral procession was entering the door. First the priests, then the casket and finally the little boys.

3. Barren landscape. A *cemetery*—graves far apart—one grave opened and they were putting the casket in it. The priests and the boys were standing around the grave, the boys waving the incense. There was no one else there at the funeral. ["That is the funny thing about it—there were no friends."]

4. I saw myself in *New York* just as I am now and I was walking down the street—high buildings on either side—there were busses, automobiles and people—["I did not recognize the street."]

5. *Theatre*—I was going into it by the main street door. I went down the side aisle to the dressing room and I then saw myself on the stage dressed in Grecian white robe—I was simply standing there ["not acting—I did not know what I was going to do"]—no other actors on the stage—audience in their seats.

6. *Apartment house*—I went in—took elevator—went to an apartment I felt to be mine—let myself in by latchkey. It was a beautifully furnished apartment, rugs, etc. I saw all the furniture. I threw off a long neck piece of fur, then I stood at some long windows and looked out. I seemed considerably older than I am now, as if I were more of a woman than I am now—say 36-38 years.

## SCRIPT

By the 'Juliana system' written synchronously with the hallucination

"I am at last out of this world of toil, and with the angels rest; my soul has wended its way to the heavenly realms.

This is a real spirit message now."

[Signed] Juliana.

The 'Juliana system' was now interrogated and it was easily demonstrated that this system had no causal relationship with the hallucination but that the spirit message was written as a jest.

[Here an interesting psychological phenomenon that I have frequently observed and reported developed: namely, the emergence of emotional tones from a subconscious process. While this system was writing the spirit message and during the first part of the interrogation when the system manifested a humorous, almost hilarious, mood the subject was in high spirits, joyful, and felt the spirit of fun. Later, during the latter part of the interrogation when the 'Juliana system' admitted her tomfoolery and wrote of her past (the period when she was a double personality), the subject remarked without knowing what the hand wrote: "I feel serious, now. All my high spirits and feeling of fun have left me"; and then, as a coconscious confession of previous deception was written, "I have a sad, remorseful feeling<sup>1</sup>." This emergence of the feeling tones belonging to subconscious processes is of significance in the mechanism of moods and exalted and depressive states. The phenomenon accompanied some of the hallucinations.]

My first thought, in the failure to find in the Juliana script any psychological relationship of imagery with the hallucination, was that the findings would prove to be exceptional and that a different type of mechanism for the hallucination would be disclosed. On further investigation, however, this proved not to be the case, as a correlated script was obtained from another subconscious system—the 'Susie system.' This latter did not attempt to go into the details of the subconscious thoughts. I am rather sorry now I did not demand this, but my whole attention was concentrated upon the principle and the source of the first obtained script and of the hallucination<sup>2</sup>.

When the subconscious 'Susie system' was tapped, as was now done, this system at once claimed to be the source of the hallucination and wrote the account given below of the 'thoughts' which went on subconsciously in this system while the hallucinations were being formed.

<sup>1</sup> "I have a final confession to make—that I have told falsehoods and who can blame me. I was fooled for years by a lying subconscious mind who made me a puppet for its own trickery. Perhaps you will understand. Think of the many years I was fooled into believing I was a soul." This confession refers not to these experiments but to the early period of double personality above mentioned, when the subconscious 'Juliana system' claimed to be the reincarnated soul of a Spanish peasant.

<sup>2</sup> This involved considerable work, including rigid cross-examinations of the two systems that wrote. To reproduce here the details of this examination would take us too far out of the way. It is sufficient to say that it transpired that the 'Juliana system' facetiously took control of the pencil and as a joke wrote the script pretending to be a spirit message. Although the message was short the 'Juliana system,' of course, might have gone on writing during the unfolding of the whole hallucination.

I have arranged the 'thoughts' as given in a parallel column in apposition to the corresponding hallucination.

HALLUCINATION Details of scenes given from memory immediately after their completion	SCRIPT By the 'Susie system' written subsequently to the hallucination and therefore from memory
1. I saw a <i>funeral</i> —a casket on a cart such as is used for soldiers with black drapery over it and a white cross of lilies on the top. I could see the petals. There were black robed priests carrying huge white candles and some little boys dressed in white following the casket—shaking incense burners. Streets paved with large rough cobble stones. ["It seems to be in Italy—seems foreign to me."] ["I had a feeling at the time the funeral was Juliana's. That is what made me laugh."]	"I had thoughts of Juliana's passing out of existence and of Susie standing on her feet alone and gaining fame from her own conscious efforts and not leaning on any one for support." [Here the 'Susie system' was told to be more explicit.]
2. Door of <i>cathedral</i> . I could see the tower and on top of it a cross. The funeral procession was entering the door. First the priests, then the casket and finally the little boys.	"I had thoughts of a funeral of which I made the Juliana complex the central figure."
3. Barren landscape. A <i>cemetery</i> —graves far apart—one grave opened and they were putting casket in it. The priests and the boys were standing around the grave, the boys waving the incense. There was no one else there at the funeral. ["That is the funny thing about it—there were no friends."]	"And then I thought if the Susie complex would struggle she could gain fame as an actress"
4. I saw myself in <i>New York</i> just as I am now and I was walking down the street—high buildings on either side—there were busses, automobiles and people—["I did not recognize the street."]	"and maintain her own apartment just as she pleased, a long standing heart's desire."
5. <i>Theatre</i> —I was going into it by the main street door. I went down the side aisle to the dressing room and I then saw myself on the stage dressed in Grecian white robe—I was simply standing there ["not acting—I did not know what I was going to do"]—no other actors on the stage—audience in their seats.	
6. <i>Apartment house</i> —I went in—took elevator—went to an apartment I felt to be mine—let myself in by latchkey. It was a beautifully furnished apartment, rugs, etc. I saw all the furniture. I threw off a long neck piece of fur, then I stood at some long windows and looked out. I seemed considerably older than I am now, as if I was more of a woman than I am now—say 36–38 years.	

The successive scenes of this hallucination are plainly the pictorial representation of a theme which is briefly set forth in the script of the 'Susie system.' This system, it should be explained, represents the aspirations of the normal self. The 'Juliana system' is a subconsciously

perseverating remnant of the former secondary and alternating personality from which this system has been derived.

*Observation VIII.* In this observation a series of shifting scenes developed. As each picture appeared the subject, as in Observation VII, called out the fact and described in general terms the scenes: "I see a street in New York"—"I see a scene in a theatre"—"A ship on the ocean," etc., with a few additional descriptive words. *While these pictures were developing* the hand automatically wrote the script signed 'Susie.' At the same time I recorded each picture and marked on the script the moment of its beginning and ending. As in the previous observation, immediately after the completion of the script and the hallucination, the subject described in detail from memory the pictures she had seen, taking them one at a time in the order of succession. This she was easily able to do as she could vividly revive them rich in detail. Each picture was then compared with those words of the script that were written during the occurrence of that picture. Arranging the pictures with the corresponding script in parallel columns I would invite your attention to the striking failure of correlation between the two synchronously occurring phenomena. Careful examination reveals that the hallucinations cannot be regarded as the emerging imagery of the subconscious process producing the script. For example: corresponding to the picture of a ship's dock (4), we have only the word "shall"; and to Hotel (6), the word "earth." The complete observation may be arranged as follows:

### VIII. Hallucination in seven scenes: Visit to Italy.

Scenes: 1. Street in New York—2. Theatre—3. Ocean—4. Dock—5. Subway—6. Hotel—7. Hotel Room.

(Described in general terms verbally and synchronously with the script of the 'Susie system.')

#### SCRIPT OF THE 'SUSIE SYSTEM.'

"I am thinkinking [1] of New York and of the [2] fame I shall some day achieve as a great ae[3]tress and of my dreams of long standing shall [4] shall [5] hall mature and I shall travel to various sparts of [6] the earth [7] and I shall become overjoyous of my painstaking efforts and the fruit of my toil.

[Signed] Susie Sub[conscious]."





## 5. Subway.

Trains in it. I went down the subway from the carriage and got in the train—doors opened on the side as in London. It was in Italy because I saw funny language like Italian on the bill boards. No, it was Spanish language. I don't know where I was. It was Spanish or Italian. The strongest feeling in my mind was Italian.

## 6. Hotel.

Portecochère of a big white building. I went in with this man, in a big lobby. I registered myself—I could see this man talking to the clerk as if he knew him. It was as if he was telling the clerk to look after me. He tips his hat and goes away.

## 7. Hotel room.

A beautiful room—done in old rose draperies—white furniture—imperial looking, it was so elegant. Different from anything you see in hotels. I was *very tired*. I was walking across the floor—all I could do and threw myself on the bed. I felt as if I said out loud—"At last I have realized what I long hoped for." ["I don't know what that meant."]

["I don't know who the man was—I felt that he was a foreigner—he knew how to sing—as if an impressario."]

hall mature and I shall travel to various sparts of

the earth

and I shall become overjoyous of my painstaking efforts and the fruit of my toil.

Although no detailed correlation between the hallucination and the script can be postulated from the point of view of imagery of specific concrete thoughts, that is in the sense that the imagery of the hallucination can be recognized as the images of the specific ideas of the script, there was a general correspondence of the themes expressed by both. The script speaks in general terms of her aspirations and their fulfilment: the hallucinations as a whole represent a series of imaginary incidents which carry out concretely as fantasies these aspirations. But no concrete subconscious thoughts are discovered of which the hallucinations would be the normal images. The first two scenes (New York and Theatre) and the last (Hotel Room) might be interpreted as exceptions, but in a second script obtained later we shall see that the imagery precisely corresponds to images that would be expected of this second train of specific thoughts.

Undoubtedly the general theme of the first script was determined in accordance with a well known principle: that is to say, by the more specific ideas of a second subconscious process that induced the hallucinations.

In search of another system that might be responsible for the imagery of the hallucinations, the 'Juliana system' was now tapped by automatic writing. This system, after claiming that the pictures belonged to its

thoughts, wrote successively, but of course from memory, the 'thoughts' that were subconsciously experienced during each hallucinatory scene. The given data may be tabulated as follows:

## HALLUCINATION

## 1. Street scene in New York.

I saw lots of people—automobile busses—cabs—automobiles—myself—I seemed to be very intent and in a great hurry walking on the sidewalk.

## 2. Theatre.

I was in a theatre on the stage—only a piano and man—(not set). I was being taught by this man at the piano, singing. (I could not hear my voice.)

## 3. Ocean.

I was on a ship in midocean—no land in sight. I was walking on deck with the same man. It was dusk.

## 4. Dock.

I could see baggage being taken off by express and baggage people—lots of people hurrying around holloing for cabs—awful turmoil—I was with the man leaving the ship and on the dock—was getting into a carriage with the man.

## 5. Subway.

Trains in it. I went down the subway for the carriage and got in the train—doors opened on the side as in London. It was in Italy because I saw funny language like Italian on the bill boards. No, it was Spanish language. I don't know what it was. It was Spanish or Italian. The strongest feeling in myself was Italian.

## 6. Hotel.

Porte-cochère of a big white building. I went in with this man, in a big lobby. I registered myself—I could see this man

## SCRIPT

By 'Juliana system' written subsequent to the hallucination from memory. The form correspondingly differs from synchronous script<sup>1</sup>.

I thought I was in New York preparing my voice for an operatic career and I was on my way to the Metropolitan Opera House to see a man who would help me train my voice. That is why I was in a hurry.

I was thinking that this noted man—I do not know his name but he was there [Metropolitan Opera House] and was very much in earnest with my vocal progress; I was thinking I was rehearsing an opera with him that he claimed I would score a success in, and he proposed taking me to Italy to further my studies in that rôle.

I was thinking of the trip promised me at the theatre and of being on the liner bound for Italy where I would resume my studies in the opera of *Traviata*; also that this man would take me there.

I was thinking that we had reached our destination and I was in Italy.

The scene as near as Susie told it was a perfect picture of what I was thinking.

I was thinking of passing through a subway. That was my thought—a European one.

I was thinking I was in Italy and I was very tired after the ocean voyage and very joyous to be in the land of my dreams.

<sup>1</sup> As the script purported to give the content of past thoughts by retrospection, the memories are given in rather general terms and it was obviously impossible to accurately correlate in time with the 'thoughts' the images within each scene. Therefore I did not ask for minute details. The danger of artifacts in so doing is obvious.

talking to the clerk as if he knew him. It was as if he was telling the clerk to look after me. He tips his hat and goes away.

[The script later claimed she was thinking of a hotel also, but forgot to write it. The fatigued condition followed this thought. It is significant of the absence of any intentional fabrication of thoughts to fit the pictures that the script here went on as follows: "I was thinking this noted man was about to return to the hotel for me and take me to an opera house to try my voice, and I was thinking the place was very dark and cold and outside it was very bright and sunny." While the pencil was writing this sentence the subject saw a vision of a theatre corresponding in details to the thought; but there were no such images in the original hallucination. When asked to explain this absence of hallucinatory imagery, the script said it could not, but that the thought was "not vivid and did not develop into a picture," as obviously is most generally the case; otherwise we all should be having hallucinations.]

#### 7. Hotel Room.

A beautiful room—done in old rose draperies — white furniture — imperial looking, it was so elegant. Different from anything you see in hotels. I was *very tired*. I was walking across the floor—all I could do and threw myself on the bed. I could feel as if I said out loud—"at last I have realized what I long hoped for." ["I don't know what I meant."]

["I don't know who the man was—I felt he was a foreigner—he knew how to sing—as if an impressario."]

I was thinking that my efforts in the future should bring me the reward of such a beautiful chamber and I thought out each detail of rose and ivory that Susie described<sup>1</sup> only she did not tell all the wonderful things.

### C. AUDITORY HALLUCINATIONS.

Alongside of the visual hallucinations it will have been noticed that there occurred auditory hallucinations in a number of instances (Observations I, II, III). Experiments were now undertaken to determine, if possible, whether or not the mechanism of such auditory phenomena was the same as that of the visual variety. First such evidence as might be derived from the self-analysis by the subconscious process which induced the hallucination was obtained. In evaluating this evidence it should be borne in mind that the particular auditory hallucinations to which the subconscious analysis referred were 'messages' from the subconscious to the personal consciousness, or a subconscious *intention* that

<sup>1</sup> Referring to the conscious oral description of the hallucination by the subject.



the words should be heard by the latter. This is not always a condition, as in Observations I and III. The subconscious, however, on numerous occasions has experienced this type of hallucination, as when, for instance, she acted as an amanuensis for the internal voice and to the dictation of the latter wrote a long story. Such messages were, however, quite common in this subject just as they are frequently met with in the hallucinations of the insane.

*Observation IX.* The subject heard an internal voice say:

(a) "Get that smoke out of your lungs";

and again,

(b) "Tell Dr Prince the Juliana complex is still holding her ideals<sup>1</sup>."

In response to a searching interrogation as to the mechanism of this and other auditory hallucinations the subconscious process gave testimony which may be summarized as follows:

In such hallucinations subconsciously the words are first *intensively thought out and grouped together as auditory sounds or words*; that as a result of this intense subconscious thinking the auditory words emerge into consciousness as the hallucination; but in addition, in order to produce such a hallucination, there is a subconscious 'striving' or 'aim' to have the thoughts emerge into awareness, a motive to have the thoughts heard; that if there was no such subconscious desire the subconscious thought would remain 'cut off' or 'away by itself' (i.e. dissociated and not in awareness).

In this way the script explains why sometimes with subconscious thoughts, as in automatic writing, auditory hallucinations occur, and sometimes not. *Intenseness* of thinking and *striving* were required although the two apparently were considered as identical. The script could not explain the phenomena further. The main point is that when the auditory hallucinations occurred, the words or auditory 'images' were first formed subconsciously and then, as the second step, emerged into awareness as the hallucination. It is obvious, however, that there must be another factor to cause the emergence, as auditory hallucinations do not invariably or even commonly accompany automatic writing, and they occur when no subconscious volition to this end is in evidence. Perhaps intensity or vividness of the 'images' may be sufficient and the

<sup>1</sup> In explanation of this the script wrote that it referred to a past conversation with me and the "high ideals" she "had heretofore set forth" in regard to smoking cigarettes which she conceived "harmful." The message apparently resulted from a subconscious memory of this conversation and the reflection: "I felt" (so the pencil wrote) "cigarettes were like morphine and I feel uneasy over them. I must not touch them."

determining factor. Subconscious desire or volition was insisted upon by the script as the factor in the hallucinations in question which were plainly of the message type. Accordingly it was arranged, as a test of this claimed ability to produce a hallucination by subconscious volition, that the subconscious process was to write (without the knowledge of the personal consciousness, *i.e.* the subject), a sentence the words of which she would will the subject to hear as a hallucination, and the latter, if and when she heard an internal voice, was to speak aloud the words internally heard. The two—writing and internal voice—would then occur synchronously and could be recorded. The results were as follows:

*Observation X.* The hand wrote:

(a) "I am going to play Princess Theres on the stage<sup>1</sup>."

At the same moment while the hand was writing, without seeing the script and without knowledge<sup>2</sup> of what was written, the subject exclaimed:

"I am going to play Princess Theres on the stage." These words she heard as an internal voice.

(b) (The hand wrote): "I smell cigarettes."

As before the subject heard a voice and exclaimed:

"I smell cigarettes."

In such observations we have written speech and verbal speech synchronously produced. The words of both were identical. The written words were produced by some process not in awareness without the knowledge of the subject. The subject pronounced the same words at the same time claiming that she heard them internally and her veracity is not open to doubt. That there must be a correlation is manifest and we must conclude that the same process that produced the script induced the internal voice. As this was done by prearranged intention it must have involved volition of some kind. (Of course I had no knowledge of what the words were to be.)

<sup>1</sup> This was accompanied by a vision which as described was identically the same as that experienced in Observation IV—the same court scene, stage setting, marble floor, herself dancing, etc. When asked to explain how it was that the vision portrayed more than was in the auditory hallucination and the script, the hand wrote: "It had been picturing for years [*i.e.* previously constructed] and all that had to be done was to flash it before the conscious thought like a moving picture." This picture was "intensely thought of subconsciously." (Here intensity rather than volition apparently was the determining factor.)

<sup>2</sup> As she averred and I believe.

## D. DREAM IMAGERY.

The phenomena elicited in the following record and analysis of a dream, while not belonging strictly to hallucinations, yet are so closely allied and show such similar mechanisms that I throw it in for good measure.

*Observation XI. Dream of the Paprika Dance.*

"I saw a stage with a huge red pepper in the centre of the stage and the lights were dim. Then I heard a loud burst of music and the scene changed and the large pepper opened in quarters and a large group of women in bright red tights were dancing around upon the quartered pepper. Upon their heads were caps of red, fashioned like the top of a red pepper with the stem serving as a tassel. The stage was now ablaze with light and just as I awakened it grew dim and the women scampered away."

After the narration of this dream, which impressed the dreamer because of its 'completeness,' the beauty of the music, and the vividness of the memory left of its details, the subject sketched the two dream scenes. These are here reproduced.

The method of automatic writing was then utilized to obtain subconscious memories as testimony of, first, what, if any, subconscious mental processes had gone on during the dream and therefore, of course, during sleep, and, second, the meaning of the dream and the motive for its production. In response to a rigid cross-examination the following was testified to by the script.

The idea of the dance had been *subconsciously* thought out the day before as a novelty for a vaudeville sketch. The motive was to create something "to put before a producer to gain an avenue of escape from the miserable shopwork." Every detail of the scenes was thought out including the music. There was also a desire to have the "conscious mind know of this creation." "In the day time the conscious mind was too busy to take in anything from the subconscious mind." But at night when "the mind was passive" this could be done. So when the mind was asleep "I thought and thought very hard all I had created," the subconscious testified. All the details of the previously thought out scenes now "were grouped together into a finished product." "The intensity of my thoughts created the pictures, first in my complex of thoughts," and then these pictures or images entered "the conscious mind" as the dream. In other words, as with hallucinations, *the normal*

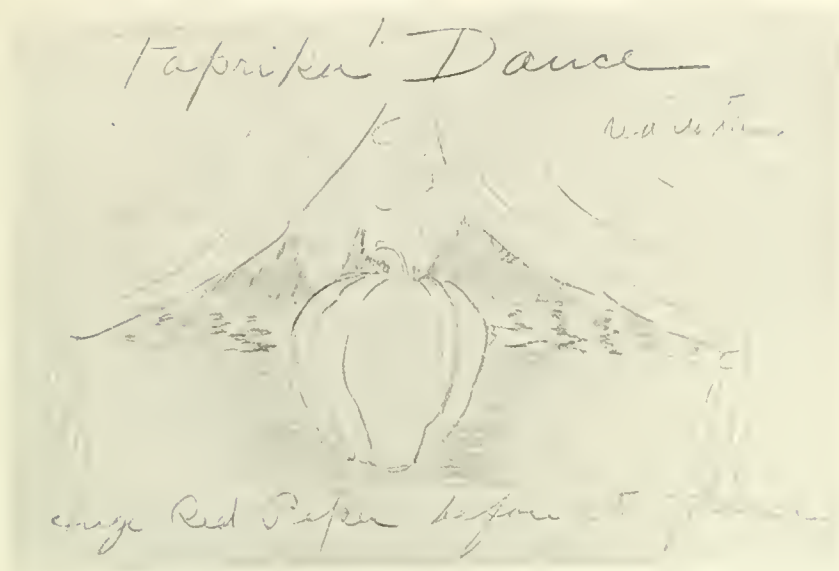


Fig. 4. Drawings of dream imagery.



*imagery of thought, but now subconscious thought, emerged into consciousness to become the dream imagery*<sup>1</sup>.

The *meaning* of the scene (that became the dream) was "a passionate dance and atmosphere." "The red pepper bespoke that idea, warmth of the dance and its dancers" [symbolism]. The motive was not a (sub-conscious) sexual wish on her part nor was the scene a sexual wish fulfilment. Nor was there any sexual feeling or desire at the time of constructing this vaudeville novelty or during the dream. (In reply to a question as to this the hand wrote emphatically, underscoring twice, "NO!")

The purpose was the artistic one—common we must admit to scenario writers if we judge by the present day agitation for censorship of the 'movies'—to create something that would draw and specifically "attract the male attendance." "The idea intended to be conveyed to the public by the red pepper and the movements of the dancers was that of passion." This "the red peppers symbolized because they are hot. The idea struck me," the script explained, "as a novel one without going into details and dissecting it as you are doing. I thought it a spiey, snappy idea. Now what would you think if you went and viewed it at a theatre?" "The women coming out of the pepper symbolized only beauty of form; nothing more."

The idea of the red pepper was suggested by seeing at home a paprika can and its highly seasoned contents. *This idea flashed into her mind at the time as a good one.*

This interpretation of the motive of the dream of course will be objected to by some critics who will insist that there was a deeper unrevealed and unsuspected 'unconscious' motive in the form of a sexual wish. This criticism cannot be disproved but it is very amateurish in that it shows a lack of familiarity with experimental psychology and an all comprehensive knowledge of the phenomena of the subconscious. It is equivalent to a denial that other 'unconscious' processes than sexual wishes are capable of constructive imagination.

However, the main point I have in mind in citing this observation is not the interpretation of the dream but rather to show the analogy between one type of dream imagery and the imagery of hallucinations, and that, if this observation stands as reliable, the mechanism of the two is identical. This is what should be expected as, after all, dream imagery is one type of hallucinatory phenomenon.

<sup>1</sup> Apparently this was not the expectation or intention but only a necessary consequence of the intensity of thought. The intention was to create a condition of bodily nervousness which, from previous experience, would result in the subject investigating the cause, etc.

## CONCLUSIONS.

1. There is a type of visual hallucination in which the imagery has its source in a dissociated mental process of which the subject is not consciously aware. Such a process is by definition a subconscious one.

2. The content of this subconscious process contains images identical with the normal imagery of conscious thought.

3. The hallucination is due to the emergence into consciousness of the previously subconscious images. This emergence necessarily results in a hallucination in that the imagery of the latter is not related to the content of the conscious train of thought but is foreign to the latter. This is a necessary consequence of the imagery being normal elements in a separate dissociated train (mental process).

4. The subconscious process is essentially a coconscious one of thought.

5. There is a type of auditory hallucination which has essentially the same mechanism.

6. As there is a type of hallucination (visual and auditory) occurring in the insanities which is identical in form, structure and behaviour with that produced experimentally in this study, the conclusion is justified that such hallucinations of the insane are due to the same mechanism.

7. The implication follows that when hallucinations of this type occur in the pathological psychoses, they are indications of the activity of a dissociated subconscious process as a factor in the psychosis.

8. The hallucinatory phenomenon carries the further implication that the genesis and psychopathology of the psychosis are to be found in the forces which have determined the dissociation and motivated the subconscious process.

9. It is not to be assumed that all hallucinations have the mechanism of the type here studied. It is possible that in those occurring in the intoxication psychoses and in certain forms of organic brain disease, particularly where the hallucination is of a simple unelaborated static structure, the imagery is induced by direct irritation of the cortical or subcortical neurones. It is difficult, however, to exclude the possibility that the intoxicating agent or organic process simply removes inhibition and permits subconscious dissociated processes to function. Nor can we find any analogy with the known effect of irritation of motor and other areas of the brain. Irritation, as observed, produces simple movements and simple sensory phenomena (noises). Still, the possibility of

irritating factors becoming the immediate excitants of organized complexes of neurones underlying the hallucinations, cannot be excluded. This theory needs, however, to be proved. Even the irritative theory, as opposed to the psychogenetic theory, permits of the interpretation that the irritation excites a dissociated subconscious process from which images emerge into consciousness.

10. The psychological problem of differentiating between normal imagery and hallucination disappears in that they are identical, the hallucination being only the normal imagery of a dissociated subconscious process.

11. If the evidence given by subconscious introspection be not accepted, a possible interpretation of the hallucinatory imagery is that the images do not themselves occur primarily as subconscious elements, but by the same mechanism appear in awareness as the conscious correlates of a co-active dissociated physiological process. In other words, a subconscious process is neural, not psychical. On the other hand, such an interpretation does not take into account a large mass of collateral evidence for the psychical nature of processes occurring outside the field of awareness.

12. So far from a hallucination being a regression to an infantile form of thought (Freud), it is an element in highly developed adult thought processes.

13. The mechanism of the imagery of some dreams is the same as that of the hallucinations of the type here studied.

## THE SPIRITUAL SIGNIFICANCE OF PSYCHO-ANALYSIS.

BY BEATRICE M. HINKLE.

MANY statements have been made in recent years to the effect that science and religion are not widely separated and antagonistic, as formerly thought, but are actually near relatives. The discovery of this relationship and the recognition of the possibility of their reconciliation has, however, been made chiefly by those interested in the preservation of religious ideas; there has been practically no consideration of the subject by anyone working from the scientific viewpoint.

Indeed psychoanalysis, which is one of the latest claimants for scientific recognition, has been largely instrumental in bringing into a clear light the soil and roots from which the spiritual arises. As a result of this work it is implied quite generally that the conception of the spiritual and religious nature of man can be regarded with a smile of superiority and this ancient heritage dismissed as having been disintegrated into its primitive elements and therefore of no further value for humanity. On the other hand the enemies of this technique and its findings have hurled as their most deadly weapon against its theories the charges of mysticism, of occultism, and of similar scientific bogies. Furthermore, these charges are for the most part accompanied by evidences of those emotional reactions of fear and anger which reveal something quite different from the cool detached scientific spirit that one expects from scientists; rather is the attitude one with which we have become more familiar in association with the defenders of religion when danger seemed threatening from the encroachments of science. Therefore we must realize that something fundamental is here involved which has a connection with a deep instinct in man. As William James expresses it "science itself has become devout."

Unfortunately, although the ideas of man may change his need does not change. His desire and longing to-day are the same as they were through the long stretches of prehistoric time out of which the myths of the race and the earliest of the Gods were evolved. He who in one age prayed "Our Father which art in Heaven" cannot, in another, eliminate this ancient human longing merely because it comes into conflict with



his intellect, while his entire emotional disposition remains the same. Yet there is for him no returning to the "God of his Fathers," and those who attempt to return meet with the disillusionment of a man who returns to the toys of his childhood. He humbles his pride and attempts to ignore his hard-won knowledge only to find the God who was once warm, living and near, is now a pale emasculated abstraction, a 'Life-force,' a 'Spirit of Universal Good,' a 'Universal Energy.'

With the development of science and the emphasis on material and concrete fact, there began that objectification and formalizing of the Idea which inevitably destroys the spirit, and in this process the conception of God became deeply involved. Any effort to bring God into the realm of concrete reality, an object of the senses, or to make of him a purely intellectual and formalized being could not result in anything else than the loss of God altogether; for it is God as love, as a spirit, an unseen power, psychologically real, but not sensibly real, who is the object of worship. With the loss of this purely spiritual and personal God, the supreme object of love and adoration has also disappeared, and man is without an object great enough to act as a lure and lead him to reach beyond himself.

The knowledge that the old image of God and the religions belonging to it were the product of fear on the one hand, and the infantile wish for a loving, perfect parent on the other, in no way disposes of the problem nor renders the great need of humanity less poignant. For the real loss sustained by humanity in the materialization of the God image and the disappearance of faith in the power and greatness of religion for the development of individuals, has thrown a great amount of energy (libido) formerly bound up with these conceptions into the unconscious, and to this is due, in great measure, the disturbed, dissatisfied state of present day humanity.

Therefore, we are forced to seek for another way of solving the problem which shall at once recognize man's inner need and yet conform to the scientific attitude and the resulting reality of to-day. It is for him to face himself as object, to delve into his own depths to discover the origin and meaning of this need in himself and then deliberately to set himself the task of meeting it in an attitude satisfying to his intellect as well as to his feelings.

But this task is not one that can easily be accomplished by the individual unaided. Self-knowledge is not born of introspection, for introspection deals only with consciousness, and the springs of action and desire lie in the unconscious. He has need of a help outside of

himself, of an object conceived of as beyond himself, on whom he can project his love, and here he finds that the forces which destroyed his Gods, the forces of science, are already busied with the task of helping him to a new fulfilment.

Psychological science is largely occupied in these days with the problem of resolving the complex into the simple, and the disintegration of man's most cherished conceptions and ideals into what appears inferior and unworthy is not the least of the causes of his present disturbed condition. However, the tearing down which is the particular function of science can at the same time be the necessary process in the service of a new and better utilization of those great forces which are the basis of all man's achievement and strength as well as of his weakness and failure.

It is the aim of this paper to show that in psychoanalysis, paradoxical as it may appear, we have a method which has the power of awakening in the individual the very subjective experiences which we call spiritual, and which make for the kind of psychic growth and development that religion in all ages has aimed at calling forth. It seems an extraordinary fact that out of science, known chiefly as the destroyer of individual values, there has arisen something new and potentially creative, not only of individual values but of more highly evolved and integrated individuals themselves.

Psychoanalysis concerns itself with the feelings and emotions, not as many imagine that it may destroy them or rob man of something beautiful and precious, but in order to give him an understanding of them and thus help to release him from bondage and lead him to a greater power and freedom. The very nature of this task, dealing as it does with the strongest and deepest elements in man, namely those of love and its allied forces, must of necessity produce a great disturbance in the mind, for reason plays a poor second where strong emotions are aroused. However, when the real significance of the work is grasped, it will be seen that something has been added to man; a new power produced by the widening and deepening of his consciousness. Conceptions and ideas concerning love and religion, heretofore only intuitively expressed, now become actualities subject to scientific examination, and when interpreted psychologically are intellectually acceptable and become capable of conscious direction. Although originally developed entirely as a therapeutic measure, the technique of psychoanalysis has so greatly increased the understanding of human conduct that its usefulness has been broadened far beyond that of a treatment for the sick. It is this

aspect of the subject that offers humanity a new means of assistance in its endless struggle towards a higher development, one which includes the primitive basis of human desires as demanded by science and, at the same time, the experiences and conceptions known through religious teachings.

Psychoanalysis as developed and propounded by Freud and his pupils, definitely regards the inadequate or faulty development of the sex instinct, under which heading he embraces all the tender emotions associated with love in whatever form, as the basic cause of all neurotic states and symptoms. He considers that children hold a definite sexual wish towards their parents and that the failure to renounce this by the natural means of the mechanism of repression and transference to another object (such as occurs normally during the period of object seeking), is the cause of a lack of psycho-sexual development, with the consequent outbreak of a neurosis as a substitute formation for the unconscious and denied sexual desire. In the same way he attributes the development of culture to erotic sources and in the predominating influence which he ascribed to the sexual instinct in the life of man there is reason enough for the great antagonism and misunderstanding of his work which it was fated so long to receive. There can be nothing surprising in this when we consider what a new and radical departure from time-honoured medical methods as well as from the popular religious and philosophical conceptions, was implied in his theories. That the sexual instinct and the love emotions should play a very important part in the aetiology of the neuroses, however, is surely not extraordinary when we consider the attitude towards sexuality which our civilization has produced. With slight reflection upon the matter it is very evident that an instinct which has been fought over and struggled against for thousands of years, which has been the leading theme in poetry, romance, and the arts, must be something which possesses the power to disturb man greatly and even affect him destructively, although in a form which he is quite unable to recognize. His taboos and repressions have not destroyed it. It goes on operating in spite of his strongest opposition and his highest ethical formulations. The way of the past was to degrade the instinct and see it as something inferior and unworthy of man which must be repressed. Hence to discuss it in a concrete fashion as an active factor in human life appeared sullyng and unclean. The great outcry against recognizing the power of the sexual impulse over humanity, and even against permitting an examination of these claims must itself signify something important. It reveals in the first instance

a great fear that the problem may not be really disposed of and therefore that man's effort through the method of repression may be found inadequate. With no other way to meet the danger he may be confronted with its overwhelming power; for man may not surrender himself to the 'pleasure principle' save at his peril.

Practically it is impossible to deal with the problems of any individual without coming upon sexuality; the very repressions and inhibitions to which it has been subjected have only served to give it more prominence and importance in life than it might otherwise have had. This fact has been taken advantage of by critics who have asserted that the impure mind of the analyst suggests sexual problems to the patient and that they are not spontaneous productions. There is no doubt that there are analysts who are incompetent, crude and underdeveloped themselves, and incapable of handling the delicate material with which they deal, just as there are surgeons who are clumsy and awkward operators. Unquestionably great harm and injury can be done by both. This, however, is no argument against surgery, nor is it an argument against psychoanalysis; nothing could be further from the truth than that the method of psychoanalysis suggests to the patient the material which he produces. Nor does analysis strive to hold the individual in the gross forms of his instinct; rather its aim is to help him to lead them to a higher expression.

Besides the sexual instinct there is another great primary force at work in all human beings, namely the ego instinct, the desires and strivings of which are as imperious and demanding in many persons as the sexual instinct. Freud recognizes the ego motive, but has given it very little importance, definitely stating that psychoanalysis is only concerned with showing that all egoistic strivings are admixed with feeling components from the sexual sphere. The claims of the ego impulse for independent recognition soon found a champion in one of Freud's earliest pupils, Alfred Adler. He became convinced that instead of the sexual impulse playing the predominant rôle, the strivings of the ego under the aspect of the "Will to Power" were the controlling motives of human life and dominated character formation, conduct, and the neuroses. He also saw the sexual element in the personality but, reversing Freud's view, he considered that this is always admixed with the ego components and plays a secondary rôle. The conflicts between the feelings of inferiority and the desire for superiority Adler calls "The Masculine Protest" or the "Will to Power," taking the latter term from Nietzsche, whose whole philosophy is based on the theory that the



primary motivation of human life lies in the desire for power. Man wants to be a superman. In that desire lies the secret of all his painful striving, his arduous adaptation, and his progress from the animal up.

Here then are two distinct schools of thought within the psychoanalytic field, both using the technique of psychoanalysis but arriving at opposite conceptions, each taking one of the two fundamental impulses of life as the causative factor underlying the behaviour and conduct, not only of neurotic persons but of all human beings. They agree in just one particular. They are both determinist and are both interested in the purely reductive aspect of the problem. By this I mean that they are concerned only with the primary instincts, the reduction of the so-called higher to the lower, and could in no way be accused of attributing anything spiritual to the process of psychoanalysis.

Now, without any doubt whatever, a careful analysis of the human psyche cannot fail to discover beneath their varied disguises these primary instincts operating in all their nakedness as the dominant factors in human life. Whether the chief weakness lies in inadequate development in the sexual sphere or whether the egoistic strivings, the "Will to Power" is the primary element in the psychic disturbance depends largely upon the type of individual, rather than upon the supremacy of one theory over the other. This question of type of individual also affects the scientist, for with the same complex data before him, one will look at and stress one aspect of the data, and the other another; and the interpretation of material under consideration is largely determined by the personal equation of the investigator.

It is this fact which is largely responsible for the third division in the psychoanalytic movement. Carl Jung of Zürich, likewise one of Freud's earliest pupils, soon came to see that both these theories are really correct, and that one instinct alone cannot be held solely responsible for the totality of human weaknesses and failures. Through this study he gradually developed his theory of psychological types, and through the recognition of differences in personalities he was enabled to reconcile the opposite conceptions of Freud and Adler. The sexual theory pertains more particularly to one type and the power theory to an opposite type. Both instincts operate in all persons and it is to their faulty and imperfect development that most of the sorrows and ills of mankind are due.

Besides this formulation of different types of individuals Jung also contributed a theory of the prospective aspect of the unconscious material as opposed to the purely reductive one, and the division of the concept of the unconscious into two aspects which he calls the personal

unconscious, containing all the forgotten experiences and impressions gained in the life of the individual, and the collective unconscious, signifying that aspect of the mind carrying racial experiences and archetypes. Although the material produced by the individual in the course of analysis is the same as that which is interpreted by the Freudian school as nothing but thwarted instinctive sexual desires, or by Adler as simple egoistic strivings, Jung sees in it the germs of a striving, and an instinctive urge towards a higher development and a more evolved individual. He considers this inner demand towards individual development as the real problem of humanity and as something that cannot be safely ignored—the struggle towards a higher evolution and the failures and lack of fulfilment ceaselessly operating as the cause of our woes.

Therefore, from the standpoint of the Zürich school, analysis in the hands of a competent analyst is a method by which the individual can be assisted to help himself towards a real development and shown how to take a hand in his own re-creation. The possibility of a real psychic transformation, a rebirth for the individual, rather than merely the relief of a neurotic symptom through its reduction to its primary source, is the goal of this school of analysis.

Thus Jung's analytic theory and practice are very closely related to the pragmatic conception in philosophy, and aim at meeting the actual needs of the individual as they present themselves, even though the roots of these needs are found to lie in the original and primary instincts.

Regardless of the particular school to which one's personal predilections incline, it has certainly become clear to all who have had any experience in this work that man is actually in a much less developed state than he has imagined. Our education and culture have produced one-sided personalities. All teaching and training have emphasized the desirability of stressing and cultivating the strongest and so-called highest functions and traits, and of ignoring and pushing into the background, into the unconscious, all the weaker and less desirable elements of the personality. If the weakness and inferiority can but be kept out of sight, and the strong and desirable capacities cultivated until they become still more dominant, education feels it has done its proper work. But what are both the individual and collective results of this attitude which has culminated in the extreme specialization of our age? We need only look at the present condition of humanity and the world for our answer. The age of science has produced the machine, and with it a dependence and interrelationship between human beings out of all pro-

portion to their individual potentialities. Instead of a rounded personality and capacity we have each man representing a single part of the whole; one virtue, one line of thought, one study, or in the industrial world, one contribution to the completed article, no one person having the knowledge or capacity to produce the whole. Therefore the individual man in his life and activities has become only a tiny part in the great machine; as a separate unit of power he has ceased to exist. Thus from a superior being "a little lower than the angels," he has become a little lower than the animals—a mere cog in a machine.

As a result of this, the compensating function in nature which always arises when one tendency or direction is pushed to its limit, manifests itself in behaviour under the form of a most crude and unlovely individualism. By this I mean that attitude which reveals itself everywhere; inside groups in the egotistic strivings for dominance and preferment quite regardless of the social object; and outside in the supreme efforts at self-aggrandizement and in the conduct expressed in the adage, "each for himself and the devil take the hindmost." This is the only aspect of individualism which is recognized when this conception is broached, and it is one from which all people of finer types are attempting to escape. But this individualism is the result of the collective movement of nature as expressed through man, and our terms of good and bad, desirable and undesirable, have no meaning for it. No more satisfactory form can evolve until man consciously recognizes this need as both proper and desirable.

The question then is, how can we meet this problem as human beings instead of being merely pawns in a great collectivity we call life, dependent for our evolution and development entirely upon the pressure exerted by our environment?

Can we not directly and consciously take some part in this problem of freedom as far as our own individual selves are concerned, and deal with the totality of our natures? If there is no possibility of this, then the great messages of all the great teachers of the world are vain, and humanity may truly look upon itself as the deluded victim of an illusion so great that its destruction would be equivalent to the destruction of human life itself. I, for one, reject this assumption and base my opinion on no theory but on the facts of experience as they have presented themselves to me. Beside this, even though there appears to be little difference in the primitive instincts of the modern man and those of his distant ancestors, the cave dwellers, the phantasies of all the great teachers of mankind have assumed that a more highly developed and

perfected mankind was possible. It is true that phantasy expresses a wish, but it also embodies the possibility of a reality, for as Jung says, "What great thing has there ever been that was not phantasy first," and has not all our reality of to-day been the phantasy of yesterday?

The great teacher, who brought the message of individual valuation and emphasized the significance of love in the service of other possibilities than mere sense gratification, was Jesus Christ, and in his teachings concerning the various steps which man must take in order to attain the goal of a higher development, we find an extraordinary similarity to the actual experiences which the individual passes through in the course of a complete analysis for the purpose of individual development.

I must say that it took a long time and involved much experience before I came to this realization, and then only after the facts were presented to me again and again in the course of analysis, so that I could no longer fail to recognize the relationship. Even though the subject of religion or the moral aspect of life was never directly mentioned in the analytic process, the problems of the religious and spiritual aspirations of man under one form or other always appeared. To be sure this is not strange since the very seat of the spiritual and religious feelings, the emotional nature, as distinguished from the intellectual, is the field of analytic study and work. Therefore when we read, in William James' *Varieties of Religious Experience*, the testimony of many persons who, through painful struggle and deep recognition of sin, with the religious conviction dominating them, have experienced the same psychic phenomena which are a constant accompaniment of the analytic experience, the analogy between these two different methods of dealing with the psyche becomes obvious.

Only the other day a professional man of highly intellectual and materialistic tendencies said to me, "I had no idea when I came here for analysis that I was going to become a Christian." Expressing my surprise, I said, "But I have never discussed religion or Christianity with you, nor has the analysis been concerned with it." "No, that is just the strange part of it, but I've come to realize that in going through this analytic experience I have been living what it originally prescribed."

I am quite sure that if he had belonged to a Buddhist or Brahman culture instead of a Christian one he would have told me he had been living those teachings; for it is the experience of an analysis that he had been living, and it is this that carries within itself all the elements and possibilities of a spiritual regeneration.

Let me attempt a brief explanation of what I mean by this:



In the beginning of an analysis the first step is the breaking down of the barriers that separate one human being from another, the sharing with another, and thus rendering it objective, that inner life of feeling and thought, with the hidden actions and incidents carrying an affective colouring, which are quite buried within the personality. This is never done without considerable difficulty and painful emotion, for all finer natures shrink from the exposure of their intimate feelings and instinctively fear the letting down of the barriers and defences which hedge about all relations with others. Next comes the entrance into the personal unconscious, that realm which is unknown to the person himself. Here, in the awakening of long-forgotten memories as well as unknown tendencies and impulses, the most difficult work of analysis is experienced, for the greatest resistance arises against the touching of sore places in the soul, and against the humiliation of perceiving for oneself that many of the cherished ideals and phantasies are only illusions and self-deceptions having no actual value for the personality. The pain and psychic disturbance accompanying this realization are comparable to that other serious and emotionally charged experience belonging to the Christian doctrine which is known as a 'conviction of sin.' This mental attitude is practically unknown to-day, but when one turns back to the history of early Christianity there one can see what meaning and value for the development of personality lay in this experience.

The forced introspection caused by this intimate working with one's own personality produces a certain state of withdrawal from the ordinary interests of the world. The individual is turned in upon himself and comes face to face with his personal problem and with his instinctive tendencies, which have been buried and turned away from for so long. This withdrawal into the self we call a state of introversion and it may be of a mild or deep character. Possibly this condition may be one that is of frequent occurrence in the ordinary life of the person, and is known as a dark mood or depression which apparently occurs when some specific disturbing situation in connection with the outer world has flung him back into himself. From such a state the normal person struggles to free himself, and to turn his interest from his depressed thoughts out into the world again, so as to shut away the sense of darkness and isolation that envelopes his consciousness. But in an analysis one endeavours to give one's self over voluntarily to an examination of the inner thoughts and feelings, in order to rid this other world of its bogies and to come to terms with that shut-off portion of the personality which was left behind, ignored and unassimilated. There are several stages belonging

to this process, which periodically appear as the person proceeds upon his journey into the under world. The first stage is mild and often accompanied by feelings of the greatest relief and peace, particularly if a good *rapprochement* with the analyst has been established. This state of feeling is quite comparable to that condition so often described by religious devotees as the experience accompanying the "surrender to Christ." Gradually, however, as he enters deeper into the unconscious he becomes more identified with his early life, and there appear regularly those imperishable images of father and mother with all the affective associations surrounding them.

The mother is the all important figure for humanity, for she is the source of life out of whom we all have come, and to whom unconsciously the human being harks back in his desire to escape the difficulties of life and to recover that original state of oneness and of peace. Before birth the child is in an entirely subjective state, and has not yet achieved a separate existence; no conflict nor necessity for adaptation has arisen and the state of paradise, in which man knew not himself, is complete. With physical birth he is plunged into an objective world with everything to learn, to struggle with and to endure. Now it is a notable fact that although man is born physically and becomes a separate being with the cutting of the umbilical cord, he is only partially born psychically. He is attached all unconsciously in greater or lesser degree during his lifetime to the mother from whom he came, and after a brief space of time returns to the great dark Mother Death, who receives us all. In the state of voluntary introversion, everyone produces symbols from the unconscious which clearly embody and reveal these associations. Again and again persons will say "I feel as though a black pit were at my feet into which I must descend," or, "I am in a dark tunnel and there is no light to show me which way to go." The death phantasies which so often accompany such states clearly reveal the nature of the psychic process which the individual is passing through. The Freudian interpretation would say he is simply experiencing an infantile wish which has no other meaning than to reveal his incestuous desires. But there is a much greater significance in this experience than this sterile conception. Psychically, he is returning to the womb of the mother, truly, but for the purpose of a rebirth, and at this period of the analysis his dreams and phantasies are continually occupied with this subject.

The conception of rebirth is one of the most common themes in art and poetry. Its important meaning for man is obvious in the frequency with which he uses the metaphor in ordinary life. In a deep analysis

we can observe the conception become an actual subjective experience through which the individual passes, and from which he emerges, entirely conscious of the change which has taken place within himself.

This experience bears an unmistakable relation to that mystical admonition in the New Testament—"Ye must be born again," and the difficulty which Nicodemus had in understanding this teaching is the same difficulty which modern man experiences when he thinks of this mysterious saying and ignores the subjective aspect of his nature. To be born of water is the ordinary physical birth which comes to every one, but that other birth which is described as "being born of the spirit" is a psychical birth, the necessity of which is realized only by a few. The reason for this is not hard to find, for the process is a psychological reality belonging only to man and is far from a simple matter.

On the way to this achievement the individual comes without fail to the great problem of sacrifice which, as he expresses it, is "like the giving up of my very life." This sacrifice motive can appear under as many forms as there are individuals, but when this stage is reached it frequently takes a long time and requires much work and genuine strength of purpose; for passing through this experience makes very clear that other mysterious saying: "He that would find his life must lose it." It is in this surrender and sacrifice of the primary psychical fixation and of the longing for the original oneness experienced within the mother that the individual comes to a rebirth; only then can he bring his entire libido or emotional energy to maturity expressed in many forms under the terms of creative work and love.

Through this process one arrives at an understanding of the reality of the various subjective phenomena experienced by man and of their value for the individual, and obtains a realization of the meaning of the religious conception of the temptation of the devil and of demonic possession. The overwhelming impression which one gains through observation of many individual experiences, of the operation of forces within the personality by which conduct and behaviour are determined, and which preclude the operation of our cherished idea of free will, is incontrovertible. Free will is not a free gift. Anything approximating to it is only to be hardily won. No better description could be given of the various visions and phantasies with their accompanying affects which flood consciousness when a deep introversion occurs, than those presented in some old religious books which describe the experiences of the saints with God and the Devil. These states, sometimes of ecstatic beauty and harmony, sometimes of terror and darkness, are the regular experiences

which I have shared with many a struggling human being in the quiet of my office; and there are few of the so-called mystic experiences that do not arise, either fleetingly or more profoundly, during the investigation of the collective unconscious. There is one notable difference, however, between this work and that involved in the religious conception. The individual is always consciously aware of the meaning and nature of the experience through which he is passing, and no supernatural agencies outside of himself are necessary to account for the phenomena. Instead of mere belief or faith, an intellectual and emotional understanding of the situation and of the forces with which he is struggling, is the medium through which this method functions.

We are, it is true, dealing with the intangible realm of desire and emotion, with that realm which hitherto has been the domain of the metaphysical and the religious ideas. We are not concerned, however, with theories of any future state or world philosophy, but with the discovery and development of the inner law belonging to each individual. This development makes it possible for him to replace the infantile psychic disposition which produced his need for dependence upon an external power both human and divine, by a real moral autonomy actually achieved. Thus through actual psychic achievement in which neither arrogance nor pride of intellect has any part, a gradual winning of that goal of freedom which has been for so long the shibboleth of the human race may become a thinkable possibility.

Critics have often said that it is a great misfortune that psychoanalysis brought the sexual element into such prominence, but I think this is a mistaken feeling, based on an aesthetic ideal instead of on the ideal of facing the truth. For, as the operation of this instinct in its primitive and crude form was revealed to be a very general and dominating factor in man's life, it became necessary, if there was to be any genuine raising of instinct to a higher and more human plane, to have all illusion and self-deception shattered. Only by coming into full knowledge of himself and his actual stage of development can man consciously cooperate in the re-creation of himself. There need be no fear that knowledge will destroy any genuine product of development. That which is really achieved becomes a stable element of the personality possessing its own peculiar structure and attributes.

The difficulty with mankind was that with the advent of the Christian ideal of love as the next step in his development, a violent reaction away from the pagan riot of the senses took place with the consequent compensatory turning to asceticism. In asceticism and its denial of any



rights to the physical and material organism, all of which were to be subordinated to the 'spiritual,' we see the mechanism of repression operating in the most intense form. Now the difficulty with the repressive mechanism as a transforming power is that nothing is essentially changed by it. The desire is only forced from consciousness into the unconscious, where it produces its characteristic functioning through projection in the form of physical or mental symptoms, or the affect is transferred to an alien product where it masquerades as a genuine production.

The only value to the individual of the mechanism of repression lies in the sincerity of the effort made in the renouncing of the sensuous desires in consciousness, the struggle and opportunity for exercise of moral as opposed to physical courage, and the creation of a self-imposed discipline. The actual value of the repressive mechanism is purely collective with little or no regard for the individual. But no development takes place in the tendencies repressed; their operation is merely shifted from one form to another.

Certainly it was not without meaning that the "Redeemer of the world," the "Prince of peace," the principle of love and the bringer of individual values, was born among the animals in the filth of a stable in a crowded Oriental village. Symbolically understood such a tradition in which something of highest value is portrayed as coming out of the lowliest, carries meaning of the greatest significance for humanity, and the words embodying the same idea, "can any good thing come out of Nazareth," may be recognized as the eternal question of man, "can there be any good in evil?"

We may ask what is it that man in the Christian era considered particularly evil and has tried most insistently to crush and turn away from, as unhallowed and unclean? There can hardly be a dissenting opinion that it is sexuality and his sensuous desires. Psychoanalytic experience has taught us what the stable and animals generally symbolize when these images are produced from the unconscious. Therefore when tradition tells us that such unaesthetic and crude surroundings are the birthplace of love it is worth an effort to understand the mystery.

Through the analytic process man comes unfailingly upon his animals, which he finds usually symbolize crude collective instincts; and when he discovers the unaesthetic and even dirty forms of instinct-activity which may lie concealed in his soul under the guise of innocent phantasy or dream, then we see the greatest resistance arise against the acceptance of this repressed and ugly side of himself. He cannot remember that in

the stable love was born, and that only through an acceptance of that which is most inferior in himself and a conscious working with it instead of an unconscious repression of it, can genuine transmutation take place. When this realization is gained he can begin to understand how the path to the highest can only be found in the midst of the lowest. For the greatest values of the personality may lie hidden in the crude forms prevented from development through the repression. In other words, there is bound up in crude instinct and in the repressive mechanism an amount of energy (libido) which when released is capable of creative use in the higher aspects of human personality. In this way can be understood that spiritual truth that the lowest shall become the highest and the highest sink to the lowest. The significance of this paradoxical saying with many others of like character is intimately bound up with what we may call the 'pairs of opposites.' This phrase, which belongs especially to the Brahmic teachings of man's nature, most graphically expresses the condition of his inner discord. The pairs of opposites which in a harmonious personality are most intimately united become separated and manifest themselves in opposed tendencies, as for instance love and hate, weakness and strength, good and evil, willingness and unwillingness; that is, a positive and a negative attitude. When both aspects of these opposed tendencies are active in consciousness they interfere with one another and create conflict and indecision. When one tendency gains the ascendancy and determines action it will be immediately followed by its opposite, which will question and attempt to nullify and discredit the previous opinion or action. This can exist in a very serious degree, creating great conflict in the personality. It may be that the opposites are both equally strong and in such a case no decision can be reached and the individual becomes quite incapacitated for real life. The pairs of opposites are known in psychological terms as ambivalence of the emotions, by which is meant that every emotion has its opposite with which it is closely associated. Under certain conditions a separation may take place and this separation is a far more common phenomenon in present day humanity than the state of unity.

In discussing the peculiar quality of the happiness that religious experience produces, William James describes it as "parted off from all mere animal happiness or enjoyment of the present by an element of solemnity." Then he goes on to describe what he means by this in these words: "A solemn state of mind is never crude or simple, it seems to contain a certain measure of its own opposite in solution. A solemn joy preserves a sort of bitter in its sweetness." In these few words James

has touched the root of the process effecting that transformation of personality which a genuine religious experience induces, and the consequent attainment of happiness through this means. It is a way of producing a new fusion or unity between the pairs of opposites. This is exactly what analytical psychology strives to help the individual to attain. Through searching out that which is inferior, or low, in the personality, whether it is manifested in consciousness or buried deeply in the unconscious, it becomes possible to bring about a transmutation and through this a higher integration of the components of the psyche.

There is still another important aspect of the analytical process which I have not touched upon, but which plays such an overwhelming rôle in the total results that I cannot ignore it. This is what is known technically as the transference. The higher work of analysis depends so greatly upon the character of this factor and at the same time its meaning is so fraught with misunderstanding, that an attempt at elucidation seems necessary. Here again, in the practical work of analysis, we have a condition which closely approximates to religious experience as recorded by those who have lived it so that the desired results are attained. In the New Testament we see the whole emphasis placed on the feeling of love in the service of humanity and the development of the individual. Love for God and love for man is the great message repeated over and over again. On the other hand, we observe that there is an entire absence of even reference to the sexual element which, in a book intended to embrace the entire life of humanity, is a conspicuous omission. For certainly mankind has had no more difficult problem to meet than the management of his sexuality; and his tendency to go to extremes, either of ascetic renunciation or of complete surrender to its claims, is marked upon the pages of his history. Following this ignoring of the sexual problem by the Christian teaching, we see that all the efforts of the early Christian followers were centred upon the repression of sexuality and the development of the psychic function of love, apart from its physical aspect. Surrender of self to love of God, the ideal, and to their fellow-men on terms of equality, was the goal towards which all the faithful aimed. The questionable success of this effort in the lives of many of the saints is obvious to any one who studies the language and phenomena descriptive of their experiences. Nevertheless it is a well attested fact that those who have attained to that religious happiness and sense of well being, which has resulted from the winning of a new level of integration, have all experienced the feeling of a great love for

the divine object with a complete surrender to it, and a consequent overflowing of that feeling to all those around them.

The same great enhancement of the physical and mental state, although generally of a more transitory character, is also observable during the period of a full surrender to love for a human object. The new level of power and well-being attained by the lover, and the involuntary response of others to his joy, is a well-recognized phenomenon, "All the world loves a lover." The difficulty of maintaining this condition is due to the reality problem which enters into all human relationships. The beloved object is human as well as the lover, and therefore there are mutual conditions and demands to be fulfilled which exert a claim. The discovery may be made that the beloved possesses qualities or attributes which seem not at all loveable or desirable, yet which must be accepted if love is to be maintained. The ideal image is broken and reality must be met. Now it is a fact that there are two models on which practically all love relations are based, one is that of child to parent, and the other that of parent to child. The first is the stronger because it is the original relation in which love was first experienced, and few have reached that stage of emotional development which is necessary for an equal love. The parent-child relation is the other aspect of the purely biological stage, and between adults in both these phases sexuality enters into the problem. For this is definitely a function of reality and when sexuality is depreciated or not rightly understood, the sexual object must likewise share in the depreciation. For these reasons the love of God, a being in relation to whom the problem of equality or finite reality does not enter, once completely achieved can be more easily maintained, while the love for the human being is held with difficulty. Man's longing for perfection, for power, for love, for understanding are all embodied in the person of the Omnipotent; no fault can be found here, therefore any failure to attain the great values bound up in the love for God can only be due to the weakness and faultiness of the devotee. In creating a God so far beyond himself, who at the same time is to be loved as a transcendent father, man gave expression to a factor of great significance for his development. Through the total surrender to love entirely separated from sexuality a unification of the pairs of opposites takes place, but the ego can only surrender its claims to an object where there can be no question of rivalry. Therefore the object must be elevated to a supreme position, unassailable, and of such a nature that no comparison is possible. When this God was a living, vital reality to man his value was unlimited; but when the intellect, the offspring of the ego, entered in to question



and examine and reduce the supreme object of his faith and love to an objective reality, the power and value became correspondingly reduced. Love and reason have not yet learned to serve the same master. In the analytic process we have a situation which in a manner also approximates the child-parent relationship. The individual seeks analysis usually because he is in need. He is either sick or in trouble, or he has become painfully conscious of his inadequacies and failures and is searching for some help. The analyst appears understanding and interested. He listens attentively to all the details of the patient's story and is not bored, he even asks for more, and is not critical. Gradually in the relation developed all the weaknesses and carefully hidden sore spots are shared. It is as though a loving, watchful human parent who never interfered with one's desires were standing behind to lend aid when called upon, and on to this person are transferred insensibly the tender feelings and the imagery with which they are associated, bound up within the personality since childhood. The personal attitude of the analyst encourages this transference, for making no demands or claims for himself, remaining outside of any personal relation, and using the love called forth from the patient entirely for the latter's benefit, he becomes a suitable symbol around which all the repressed feeling life of the patient can revolve. It is through this capacity of the analyst to serve as a love object upon whom can be projected superior attributes and who at the same time can be entirely human, that the expression of the erotic feelings can take place thus enabling them to be worked through. In avoiding the mixing of his own personal problems with those of his patient and remaining impersonal and inaccessible himself during the analytic period, the analyst renders it possible for the patient to use the situation to work out his inner problems in relation to the external world and himself. The very one-sidedness of the relation coupled with the knowledge on the part of the patient that the sole interest of the analyst lies in helping him to attain the purpose for which he undertook the analysis, is the important factor. It gives the analytic relation a unique character and renders it quite different from any other, and in this difference lies its advantage over the ordinary human relationship.

It is certain that without the occurrence of transference no real benefit can be obtained from the analytic technique. Therefore we are justified in claiming that it is through the love function and its capacity of transformation to asexual aims, similar to that which takes place in a religious regenerative experience, that the work of analytic re-integration can be achieved. The great distinction between the two methods

lies in the attitude towards the repressive mechanism. In the former repression is erected into great barriers which effectually conceal from consciousness the source from which man's hardly won achievements spring; in the latter, the repressions are released in order to allow self-conscious man the opportunity of dealing with his infantile wishes face to face, and of consciously directing the application of the libido instead of giving it over to the unconscious transformation.

Although the transference occurs in the case of everyone to whom analysis can be of any value, nevertheless it is not the simple matter which it might appear to be from this brief description. It is sometimes resisted with all the energy available. The intellect and reason recognize an absurdity in the situation, and the ego shrinks from surrendering its supremacy. Besides, the necessarily unresponsive attitude of the analyst who may not allow himself to be flattered or won by the attentions and claims of the patient, produces a great resistance of the ego which feels rebuffed or humiliated. It is this situation that very often brings up the resistances which have not appeared before and the analysis of these, in whatever guise they appear, constitutes the analytic side of the work. Instead of the analyst appearing a superior being, as perfect as is possible for a human to be, he now appears unkind, or unworthy of the patient's love. The patient feels he has been disappointed and cheated; in short, all the feelings and difficulties which he has experienced earlier in connection with his love are now projected, referring back to the parents for whom an equally ambivalent feeling was held—love and dependence on one side, hate and antagonism on the other. And in the immediate emotional situation, the purpose for which the analysis was undertaken is quite lost sight of.

It is largely on the ability of the patient to understand and gain an insight into this condition and on his willingness to work through all the painful situations as they arise, that the success of the analytic work depends.

Gradually the patient comes to realize that the projection of a phantasy picture determined by his own emotional development on to reality is hardly a satisfactory form of adaptation. As the majority of the ills of mankind cluster around the problem of human relationships, the working through of the transference and its final dissolution brings an entirely new attitude towards one's fellows. In place of criticism or fear there is felt charity and consideration, for one has come to realize the common bond uniting all, and can replace belief and phantasy by knowledge and understanding.

It will be seen from this brief description of the deeper meaning of the analytic process that it is a work of the greatest complexity and difficulty and not to be entered into lightly. It demands a reverent and serious attitude towards life and towards one's self. The value and benefits gained depend entirely upon the capacity and attitude which one brings to the work.

I do not for a moment wish to convey the impression that the serious process I have discussed is necessarily what is popularly known as being analyzed. Analysis lends itself to the needs of the individual and does not force anything upon him. He may have some special symptom or problem for which he wishes the aid of analysis, and when this is relieved, so far as he is concerned, the analysis is over. Or, he may simply want to satisfy his curiosity about a subject which has become popular,—too popular at the present time—whereupon he can find an analyst from whom he can obtain just that for which he is looking. There are many degrees of analysis, and the deep searching and fundamental work referred to in this paper is only for those who are really seeking a new attitude towards life, a new attitude towards themselves, and who are willing to seek for the solution within their own souls rather than in the external changes of form and society. However, psychoanalysis is no panacea or magic wand by which the ills of humanity are suddenly to be healed. It makes great demands upon the individual, and can brook no deception nor pretence of any kind, for any playing or pretending with so serious and potent a weapon can only bring disaster. Neither is it applicable to all people; it requires a certain development and capacity for understanding, and it is the business of the analyst to recognize in the beginning whether or not a person is fitted to undergo this treatment. It is not an intellectual training nor primarily an education, but an emotional experience, although coincidentally the intellect can be set free from its emotional connection. This fact accounts for the great difficulty experienced in trying to give any clear and general understanding of the psychoanalytic process, for it is an individual experience dependent for its specific features upon the particular needs of the patient, and guided along such lines as his individual development suggests.

I am well aware that the drawing of an analogy between the religious teachings of Christianity and the emotional experience passed through in analysis, will evoke small thanks either from psychoanalysts who are striving to obtain the consideration of objective science, or from those strictly scientific workers who have no interest in anything which cannot

be counted and measured, and who will feel that their worst fears of this 'dogma' are justified, and that it is 'nothing but' a religious matter after all.

Well, we might as well admit—if Kant's restriction of empiric science is accepted—that psychoanalysis is not a science, for it deals with and its conceptions are based upon, purely subjective phenomena which cannot be perceived through the senses. Nevertheless, it makes use of a scientific attitude towards the material, although no rigid formulation can apply to a work which involves the reactions and attitudes of the human organism as a whole, instead of one of its parts. Perhaps some understanding of its relation to science may be found in the objectification which it brings to subjective experience, and the discovery of the springs of action; on the other hand, it allows the possibility of a new recognition of the significance and validity of the spiritual phenomena insisted on by religion. Thus it stands as a bridge between science and religion, holding with one hand to science, and with the other stretching out to clasp those human experiences, which belong to a psychological reality and which have hitherto been relegated to the domain of mysticism.

As a method it attempts to reproduce that deepening, broadening and developing of personality through a conscious willed effort at self-creation, which should be the result gained by man through the significant experiences of life. Such a development, painfully and slowly achieved has often caused man's tragic lament, "now that I have learned something of how to live, it is time for me to die."

Analysis attempts a short-cut to this achievement, so that a man may find himself ready to understand life while understanding is still a joy, and able to live while life is yet full within him.



TWO CASES OF WAR NEUROSIS<sup>1</sup>.

BY JAMES YOUNG.

As the field of the war neuroses is such a wide one, it is not possible to deal with it in anything like a comprehensive way in a discussion such as this<sup>2</sup>. Perhaps the best thing I can do will be to give a short description of two cases. In this way I hope to indicate in more or less rough outline the Jungian interpretation of some of the phenomena of the war neuroses, which I understand is my function in this discussion. Both belong to the type called anxiety neurosis. The chief characteristics common to them are violent fear and vascular disturbances such as palpitation, feelings of flushing followed by cold sensations, bursting feelings in the head and undue sweating. The first man T.S., aged thirty-nine, was a private with the same battalion in France for almost four years. This is an exceptionally long time to be with a battalion without 'going sick.' Some little time before the armistice he began to show signs of wear and tear and was forced by his N.C.O., much against his own will, to 'go sick.' He has never been right since, to use his own words. When I first saw him some six weeks ago he looked pale and ill, with mask-like face and trembling lips. His eyes filled with tears and his voice shook when he spoke, or was spoken to. He complained that his own thoughts about the most trivial matters gave him palpitation.

The ordinary interests of life had failed him or had assumed a hostile significance. He was exceedingly sensitive to the noise made by his three children. He was, in his own words, a "mass of nerves" to such a degree that, although unhappy, he felt best when in a room by himself. I soon discovered that he was glad to talk about the war, and that he was proud of having stuck to one battalion so long. I found, however, that such reminiscences always led to the subject of 'schemers.' By 'schemers' he meant men who 'went sick' on the smallest pretext and thus avoided facing the music. In my own experience a more common term was 'skrimshankers.' Since the war he

<sup>1</sup> Read before the Medical Section of the British Psychological Society, 14 December 1921.

<sup>2</sup> At this meeting the Freudian point of view was given by Dr G. H. Fitzgerald in his paper entitled "Some aspects of the War Neuroses," published in the January number of this *Journal*, p. 109.

had met men who had once been in his battalion and for one reason or another he had found them all wanting—they were all ‘schemers.’ This was bitter in itself, but the bitterness was increased by the fact that these men had been in good spirits and prospering, while he himself was struggling with unemployment and a general difficulty to make ends meet. His first dream was that he was covered with ‘scabs’ and that I, the analyst, was going to cure him with high power electricity. In my experience dreams of this type have to do with what may be called the problem of evil. They are always accompanied by a great sense of inferiority. In this case this is due to the fact that the patient has the ‘schemer’ in himself. Now we understand his great preoccupation with ‘schemers’ in general. His preoccupation is the result of an unconscious identification. ‘Schemers’ represent for him fear, cunning, ruthlessness, etc. They are embodiments of evil. His concern is with evil existing at present. It is not a harking back to specific incidents in connection with malingering in himself or others, an idea so beloved of the ‘Puzzle, find the buried memory’ school. ‘Schemers’ became for him the symbol of all those forces subversive of society, which he has become aware of in himself and in others as forces acting in humanity in general. He says, with a hopeless gesture, “The Germans were just as good as we were; just as good soldiers, just as good men.” This from a man who fought them for four years with whole-hearted determination! Here the patriotic view becomes swallowed up in a wider vista. The suspicion is expressed that all men are in the last resort the instruments of blind and uncontrollable forces. The field of conflict is a very wide one and embraces the deepest moral and religious questions. The conflict has to do with the acceptance of and adjustment to those forces of evil in the world which for him are immoral and irrational.

He needs a new orientation. He can take no temperate view of his own nature or that of others. He, so to say, will not allow himself a quantum of human failings. He is devoid of a sense of humour. He is inhuman, or rather I should say, not averagely human. In other words, the personality is very narrow and limited, although at the same time conscientious to the last degree. The keynote of the personality is duty. He was a pre-eminently good soldier. His whole ideal of himself was orientated to one purpose only—the fighting of Germans. No situation could be equivocal with such concentration of purpose. He always knew what to do and so the happiest period of his life was that spent in the army. Without doubt his was the type which won the war. Nevertheless it must be pointed out that with this spotless, devoted, in some ways

sublime, personality, is bound up his self-love. The persona, as Jung calls the personality, is in my opinion essentially narcissistic. Standing firm in the persona or clad in it (because the persona in dreams is often represented by costume of a certain type) we vindicate ourselves. The persona may be said to be the external attitude or surface contact with reality and as such may be represented in the unconscious by the clothes or even by the skin. With the persona, let us say, of the doctor, our self-love tends to writhe and wriggle if we are mistaken for a bookmaker's clerk. It tends therefore to love only that which mirrors itself. It is the persona, then, which in this case is represented as being covered with scabs. It is possible to regard this invasion of the spotless persona by the loathsome skin disease as the incursion of those unconscious forces in himself which are repugnant to his conscious standards. The psychological process thus represented, takes place in accordance with the general law that sometime, somewhere, everything must meet with its opposite. This is the law of enantiodromia. In connection with it the common saying 'Extremes meet' occurs to the mind. It is the inevitable result of the morbid one-sided development of the personality to which Jung refers in his article on "The Question of the Therapeutic Value of Abreaction," in vol. II, part I, of the *Journal* of this Section. Such dreams are indicative of a psychological deadlock. A struggle is being maintained between the persona and the unconscious. There is little libido available for objects and relationships in the outside world. These now only elicit forced or even negative interest. There is little rapport and there may be delusions of reference. In the case in question, there were suicidal ideas at this time. This is understandable when one considers that the inviolable persona is beset and in danger of being overwhelmed both from within and without. The menace from the unconscious has its counterpart in the menacing appearance of the everyday world. They are both aspects of the same thing. The patient finds evil within and without. The teeth and lips are more firmly set. The expression becomes more mask-like. The same resolution is summoned which he used against the Germans. Now, however, he cannot find a point of application for it as the enemy is an intangible one. The effort therefore simply serves to drain him of energy and the concomitants of this are the obscure vascular and other disorders of function to which I have referred.

His next dream was of "black men coming to kill him in the most blood-thirsty and savage manner." This is another representation of those primitive unconscious forces with which he is beset. The question

arises, how is he to come to terms with those autonomic forces, represented by the black men, which threaten to overwhelm him? It is only in so far as he is so identified with his persona and clings to it with all the tenacity of narcissism, that he is in the grip of unconscious autonomic forces. This constitutes the deadlock to which I have referred. The third and last dream of this patient which I shall quote is the following:

"The leader took us down the road leading into a wood. As we were entering the wood we were ambushed by Sinn Feiners. One of them told us to lay down our rifles and the leader, a corporal, complied with the order. A man, who was supposed to be a scout for us, ran into the wood as if to join the Sinn Feiners." In relating the dream the patient implied that there was a certain amount of complaisance about capture on the part of the corporal and that the scout frankly went over to the side of the enemy. There is therefore not the same deadlock which is represented in the preceding dream. It is as if the possibility or the need to yield were mooted. The idea of a surrender to the unconscious forces, here represented by the Sinn Feiners, is germinating. These forces of evil, inimical to his conscious estimate of himself, should be included as an accepted content in consciousness. It has already been said that these forces have their counterpart in the objective world, again as those qualities of human nature and of those aspects of human existence which appear inimical and perverse to the patient. Only after surrender to, or in other words, acceptance of these forces, can a new point of orientation be reached. Psychologically, this process must not be regarded simply as a passive process, but rather as an active affirmation of human nature as it is, and not an expurgated edition of it prescribed by some rigid moral or aesthetic code. This involves a sacrifice or renunciation of certain cherished ideals, wide enough in theory perhaps, but limited in application. It therefore has the quality of a moral act which gains its motive force from a new and wider understanding. The possibility of the acquirement of the latter must of necessity rest with the physician and success or otherwise will depend as much on his general knowledge and experience of the world as on his ability to give form and enduring value to the *progressive* and *constructive* tendencies which appear from time to time in the unconscious material of the patient. Thus, in general, is the bigoted, narrow and morbid attitude replaced by a sound new attitude. Energy which had been draining away in negative emotions is thus conserved and is now available once more for the ordinary activities of life. The conservation of energy effected also brings about a better



physiological, as well as psychological functioning. In the case in question this improvement is beginning to take place.

The second case to which I wish to refer is that of a sergeant-major, aged forty-five, who developed an anxiety condition towards the end of the war. He had not been abroad but was instructor in a training centre in England. His chief trouble before his breakdown seems to have been due to the fact that his officers had not quite such rigorous ideas about discipline as he himself had. He felt he was unsupported by the officers in his efforts to maintain discipline. At the same time he complained of being blamed for incidents which he considered arose out of the inattention to discipline which he deplored. It was certainly a difficult position. It ended in a breakdown. He had been sleeping badly, worrying over trifles, ever since. Lately he had had suicidal ideas. The first dream he brought was, "I saw ballet-girls dressed in large shield-like arrangements, walking in half-sections, a policeman escorting them." Unfortunately this is a dream which I did not analyse, so I cannot throw any light on the shield-like arrangements. But I think, taken as it stands, it gives a clue to the situation. It is possible to regard this manifest content as a representation of his own jockeying, disciplinary and regular attitude, symbolized by the policeman, towards his own feelings of a more free, spontaneous and irregular character, symbolized by the ballet-girls. I shall not attempt to elaborate this idea further. Much emerged in the course of treatment which would support and confirm it. In fact it may be said that in a realization of this lay the way to a cure of his neurosis. It is also a significant fact that on the two nights succeeding this dream, he dreamt of policemen.

Both of these cases of war neurosis in my opinion have arisen in consequence of an already existing neurotic attitude. They bear out Jung's dictum that in the greater number of ordinary cases of neurosis there is no traumatic aetiology, in the sense that the origin of the neurosis can be traced back to one specific incident. This view has been and still is very widely held and the so-called buried memory is often ardently searched for and usually found! But to quote Jung's paper already referred to: "In order to create the impression that the neurosis is derived from a traumatic moment, inessential secondary occurrences must, for love of the theory, artificially be brought into prominence. As a rule these traumata, when they are not mere artefacts of medical phantasy, or from other reasons dependent on the compliancy of the patient—are secondary events, consequences of an already existing neurotic attitude." (Here it may be said that the sergeant-major found

the actions of his officers unbearable. In a sense therefore they were traumatic or causative but only effective in so far as a one-sided neurotic attitude already existed in the form of an over-sensitiveness to authority in others, and an over-valuation of authority in himself. They were therefore only secondary.)

"The neurosis is, as a rule, a morbid one-sided development of personality, arising from very slender, indeed ultimately invisible beginnings, which can be followed back, as it were indefinitely into the earliest years of childhood. An arbitrary judgment could alone decide where such a neurosis really begins. If its determination were shifted back into intra-uterine existence, thereby involving the physical and psychical disposition of the parents at the time of pregnancy and conception—a view which in certain cases seems not improbable—such a standpoint would, in any case, have more justification than the arbitrary selection of a definite point of neurotic origin in the individual life of the patient."

The danger of the trauma theory seems to me that the physician's preoccupation with the need to find a *specific incident in the past*, blinds him to the general attitude of the patient towards the 'here and now,' in which the main cause of the neurosis lies. The truth is that the idea of the 'buried memory' has been pushed to ridiculous extremes. It makes the problem of war neurosis appear so easy that one might well wonder why there are any neurotics left at all.

To quote again from Jung's article: "It is self-evident that the cathartic method (abreaction), when dealing with ordinary neuroses, will, as a rule, meet with poor success. Since, in general, it has nothing whatever to do with the nature of the neurosis, the schematic application of the method is, in such cases, quite ludicrous. Even when apparently partial success is obtained it can have no more significance than would the success of any other method that admittedly had nothing to do with the nature of the neurosis. The success is due to suggestion. It is often of very limited duration, and clearly accidental. This success arises always out of the transference to the physician, which is established without too great difficulty if only the physician has an earnest belief in his method. Because it has just as little to do with the nature of the ordinary neurosis as, for instance, hypnosis and other such remedies, the cathartic method has with only a few exceptions long been abandoned and replaced by analytic methods."

In conclusion I should like to say that in my opinion the stress and strain of war simply unmasked a tendency to neurosis or rather fulfilled the potentiality of neurosis in a great many people, who up till that

time had been considered 'normal.' No one theory will satisfactorily explain all the facts of the war neuroses. In the end in many cases we are brought face to face with the ultimate consideration of the personal factor, after we have dealt with the factors of environment and experience as far as may be. This factor is particularly evident in the case of those nondescripts who under the all-embracing shelter of the term war-neurosis, cloak an innate ineptitude and feebleness in face of the ordinary problems of life. In an article written two years ago<sup>1</sup>, Dr Nicoll and I stated that any form of treatment which gives some adequate explanation—one carefully adapted to the intelligence—will be of use. A good transference and a suitable explanation will effect relief in a great many cases. I am inclined to think, however, that a certain proportion must be allowed to find their way back into life in their own way.

<sup>1</sup> "Functional Nerve Disease." (H. Crichton Miller.)

## NOTE ON THE MENTAL AFTER-EFFECTS OF SLEEPING SICKNESS IN SCHOOL CHILDREN.

By CYRIL BURT.

IN a recent article in *The Lancet*<sup>1</sup>, Dr Donald Paterson, the Medical Registrar at the Great Ormond Street Hospital for Children, working in collaboration with Dr Spence, of the Children's Department at St Thomas's Hospital, has published and discussed some interesting records of the after-effects of epidemic encephalitis lethargica in children. In such diseases the question invariably arises as to what is the chance of complete recovery, and what is the likelihood of some degree of physical or mental impairment. In previous epidemics no records appear to have been kept which enabled a satisfactory answer to be given to this question.

Dr Paterson and Dr Spence selected 25 cases between the ages of 3 months and 11 years in which the diagnosis appeared to be incontrovertible. They carefully excluded all patients who, before the onset of the illness, were not of normal health or intelligence. The selected cases they followed up for a considerable period after leaving the hospital.

Their conclusions are as follows:

In the majority of cases epidemic encephalitis in children is followed by permanent after-effects, either physical or mental. In only 25 per cent. of the cases in their series was the recovery complete.

In about 30 per cent. of the cases organic residual paralyses persisted after the original illness, the cases showing such conditions as hemiplegia, spastic diplegia, symptomatic paralysis agitans, muscular rigidity and tremors. In general, however, all the children seem well-nourished and have preserved the ability to gain weight and thrive.

The most significant results, however, are to be seen in the mental condition of the children. These observations are of especial interest. Recently, imbued with the importance of inherited mental defect, psychologists have been prone to attach less weight than formerly to diseases of the nervous system supervening during childhood as a factor

<sup>1</sup> "The After-Effects of Epidemic Encephalitis in Children," by Donald Paterson, M.B., B.Ch. Edin., M.R.C.P. Lond., Medical Registrar, Hospital for Sick Children, Great Ormond Street; and J. C. Spence, M.C., M.D. Durh., M.R.C.P. Lond., John and Temple Research Fellow, Children's Department, St Thomas's Hospital. *The Lancet*, Vol. II, 1921, p. 491.



in the causation of mental deficiency. Here we seem to have definite evidence that children, who would otherwise have grown up into normal and intelligent adults, are converted into mental or temperamental defectives by the misfortune of brain diseases in early years. Among the 24 surviving cases the mental condition was affected in 18. Of these, seven are grossly mentally deficient and in a state of permanent and hopeless idiocy. Others show minor degrees of mental derangement.

The eventual condition seems to depend very largely upon two factors: firstly, the severity of the initial illness, and, secondly, the age of the child when first attacked. After a short illness, the stupor lasting for a few days only, the child as a rule completely recovers. If the lethargy persists for three or four weeks, then mental deficiency may be expected, at any rate if the child is young.

Even more important seems to be the influence of age. The younger the child, the more serious the after-results. If we analyse the table of results which the investigators publish, it would appear that in children under 3 years gross mental deficiency is likely to ensue. With children aged between 4 and 8 the milder degrees of dullness, backwardness, and such lighter grades of mental deficiency as are characteristic of special schools are apt most frequently to be found. With children aged between 8 and 12 there may be a slight retardation in general intelligence, but the chief disturbance is one of temperament and character. The child may become emotional, irritable or restless, or develop delinquent propensities, such as petty violence, mischievousness, and perpetual pilfering.

Those who have to deal with cases of juvenile delinquency will realise the importance of these results. In a small but appreciable proportion of such cases that come under official notice on the ground of criminal tendencies there is a history of encephalitis or similar disease, and before this investigation was made it was difficult to know how much weight should be attached to this incident as a causative factor in the mental change.

## REVIEWS.

*An Introduction to the Psychological Problems of Industry.* By FRANK WATTS, M.A. (Allen and Unwin. Price: 12s. 6d.)

This is one of those books which are somewhat difficult to review simply because the author nowhere indulges in rash or controversial remarks towards which criticism can naturally be directed. Mr Watts is unusually well equipped for the writing of a book on this subject since, in addition to an extensive knowledge of general psychology, he has enjoyed exceptional opportunities for studying the practical working of psychological methods in industry.

Too many workers in this field have fallen into the error of aiming solely at the immediate and tangible objective of greater output. It is certainly desirable to increase the amount of work which can be done for a given expenditure of energy, always provided that this does not lead to unfair exploitation of the workers: it may even be advantageous to increase the absolute output if certain conditions are fulfilled. But always, and in all circumstances, there are aspects of industrial psychology which are of infinitely greater importance. These have been extensively neglected in the past and attention has, as a rule, been directed to far too limited a field. Mr Watts successfully avoids this error: in his chapters devoted to "Scientific Management and Labour," "Industrial Unrest and Ideals in Industry," he proves that he has a wider and finer conception of the part which the psychologist is destined to play in the industrial system than have those whose horizon is limited by methods of 'opening up' or by vocational tests.

The book is, moreover, eminently readable and can be cordially recommended to all who wish to acquire a sound general knowledge of the subject, whether from the industrial point of view or as psychologists.

W. WHATELY SMITH.

*Nerve Exhaustion.* By SIR MAURICE CRAIG, M.D., F.R.C.P. (London: Churchill & Co., 1922. Pp. 143. Price: 6s. net.)

In this book of 143 pages Sir Maurice Craig has given a comprehensive description of the causation, symptomatology, and treatment of nerve exhaustion, which is primarily intended for the medical practitioner who is unversed in psychology. In the chapter on causation he lays considerable stress on hypersensitivity as a predisposing factor, and depicts in some detail the pitfalls which beset both the sensitive child who is educated with a view to obtaining scholarships rather than to formation of character, and the adult who, by injudicious choice of his recreations, aggravates the fatigue occasioned by working at high pressure. The chapter on symptomatology contains a very extensive list of symptoms, both subjective and objective, including some dissociation-states and regressions, and leaves us with the impression that the author regards exhaustion as the principal causative factor in minor mental disturbances. This chapter also contains a short description of some of the neural mechanisms involved; some statements are found in it which will hardly

escape challenge, e.g. that "reflex actions have no psychical concomitants," and that sensory and motor apraxia are disorders of volition. A concise account is given of the reactions of conditioned reflexes, which have received curiously little attention among psychologists in this country, but it is a little difficult to see how "they may explain much of both the psychic and physical phenomena in any given case" without showing the case to be one of faulty development rather than of exhaustion.

An extremely valuable chapter is devoted to sleeplessness and its treatment, in which Sir Maurice deprecates the unreasoning fear of hypnotics which so many of the profession experience, and he gives a summary of the sedatives in common use with their relative indications which will probably be of greater value to the practitioner than any advice hitherto available.

In the chapter on treatment the methods of persuasion, suggestion and psycho-analysis are considered in turn; none of the three receives any striking tribute from the author, but on the whole he seems to prefer the first. His criticism of Freud will probably be concurred with by many psycho-therapists who employ analytic methods, but it appears to be directed only at the complete Freudian method, which he summarises as being "certainly not a form of treatment to be lightly recommended." As might be expected from his belief that exhaustion is the predominating factor, rest and muscular relaxation figure largely in the methods of treatment which he recommends, but there are important departures from the Weir-Mitchell routine, as he is averse to isolation, and to massage except in convalescence.

One cannot help feeling that the value of this book would have been increased if Sir Maurice Craig had adopted the suggestion made to the section of Psychiatry by its president last year, and forbidden himself the use of the word *nervous*, replacing it by the words *mental* and *cerebral* as the sense demanded. The main difficulty with which the reader is confronted is that of determining from page to page, whether the author is referring primarily to psychogenic or somatogenic processes. In the first page of the book he remarks that "primarily the fault may lie either in the physical or in the psychical domain or partly in both," but beyond this reference to the multiplicity of factors there is no clear indication as to whether he regards the individual symptoms which he is describing as sequelae of cerebral fatigue, or as the somatic end-result of excessive psychical activity, and there is little recognition of the idea that a discrimination of these factors has an important bearing on the prophylaxis and treatment. This attitude might suggest that the author subscribed to the doctrine of psycho-physical parallelism, but that this is not the case is shown by his quoting with full approval Dr Langdon Brown's statement that the various emotions can lead, through the sympathetic system, even to structural change.

The title of the book contains in itself an element of controversy, and recalls the conflict of opinion occasioned by the introduction of the term "Exhaustion Psychosis" into psychiatry. The arguments adduced by Stanford Read in his *Manual of Military Psychiatry* against the adoption of this term are equally applicable in the case of many of the conditions here described as symptoms of nerve exhaustion, especially in highly complicated mechanisms such as fugues and dissociation-states.

The feature of the book which is likely to cause most disappointment to many of its readers is the absence of the underlying idea of *purpose* in the evolution of neurotic symptoms, which has been found to throw so much light

on their mode of production and proved so valuable a guide to their treatment. Sir Maurice Craig has undoubtedly succeeded in his expressed aim of keeping the book as free from technical terms as possible, and as a manual of mental hygiene it should be of considerable value to the practitioner.

N. HOBHOUSE.

*Medizinische Psychologie. Ein Leitfaden für Studium und Praxis.* By DR ERNST KRETSCHMER. (Leipzig: Georg Thieme, 1922. pp. 300.)

There is an increasing recognition of the need for a psychological training for students and doctors of medicine, a need to be met only by a psychology, based indeed on medical practice, but ranging beyond the sphere of medicine and the natural sciences, and including within its scope the problems of ethics and aesthetics, racial development and the theory of knowledge.

It is Dr Kretschmer's endeavour to show the organic connection between these two spheres of knowledge and, since, in the interests of the already overburdened medical man, it is necessary to condense the material into the smallest possible compass, that part of psychology which bears directly on medical practice has been placed in the foreground, the outlook upon other psychological problems being merely indicated in passing.

An attempt is here made to differentiate on an evolutionary basis certain fundamental biological mechanisms and types in the higher mental life, having regard to the anatomical and morphological aspects. No sharp distinction is drawn between normal psychology and psycho-pathology, for the same fundamental mechanisms are met with in dreams, in artistic creation and in folk-psychology as in schizophrenia and neurosis—in hysterical and catatonic conditions as in the modes of reaction observed in animals and children. Prominence is given to the psychology of the neuroses, of hysteria and the milder borderland states of schizophrenia and paranoia. "The psychology of the neuroses," says the author, "is that of the human heart, and he who understands them understands *eo ipso* humanity." Most space therefore has to be devoted to the affective and dynamic aspects, the analysis of the higher intellectual faculties being left for the most part to pedagogic psychology.

While acknowledging the debt of medical psychology to the psycho-analytic school and in particular to the fruitful theories of Freud, Dr Kretschmer makes use of no psycho-analytic data such as he himself or other non-analytic investigators have not personally tested.

It is hoped that this attempt to present in a systematic form the medico-psychological knowledge of the day may serve as an incentive to specialists in psychiatry and psychology, and that reduction to a few fundamental biological mechanisms may make clinical instruction in psychiatry more comprehensive to students. The purely practical sections are meant to meet the needs of beginners in medical psychology, but the author presupposes a certain familiarity with the most generally accepted ideas and the most common forms of illness met with in psychiatry. For those without clinical knowledge an explanation of the more important technical terms is appended.

C. M. B.



*Benign Stupors.* A study of a new manic-depressive reaction type. By AUGUST HOCH. Pp. 278. (Cambridge University Press. Price: 14s. net.)

This is a posthumous work, completed and edited by Dr MacCurdy. Indeed, we are told that Dr Hoch is fully responsible for only the first four of the fifteen chapters, and we hope we may be pardoned for saying that these chapters are the least interesting in the book.

The author begins by striking a severe blow at our narcissism by telling us that little light has been thrown on the subject of stupor since Newington wrote his paper in 1874; but in this book he announces some great discoveries. The chief one is that some stupors are benign, *i.e.* they get well, another is that not all stupors are cases of dementia praecox, but some belong to the 'manic-depressive' group; and these pronouncements set us wondering whether there is a single psychiatrist in this country, old or young, conservative or progressive, who ever held opinions to the contrary.

About nineteen cases of 'benign' stupor are well described and they nearly, if not quite, all would be described by our own psychiatrists as examples of acute confusional insanity, seeing that they are all initiated by some definite mental shock and exhibit symptoms of mental confusion, perplexity, imperception, disorientation and other characteristic phenomena of that mental disorder. In other words, the cases quoted are not examples of maniacal-depressive insanity as we understand it, nor is a single case of true anergic stupor reported, such as we sometimes, though rarely, find in a maniacal-depressive case.

We are prepared to admit that there is some resemblance between the make-up of some patients suffering from acute confusional insanity and of those suffering from the maniacal-depressive psychosis; but, apart from symptomatic differences, there is this: that in the former the malady is initiated by some present-day worry, shock or toxin, of which there is usually no history in the latter.

This difference has not passed unobserved by the author. Indeed, he supposes that he and his colleagues have been the first to notice it, for he mentions a paper by "Hoch, August and Kirby, George H.," published in the *Archives of Neurology and Psychiatry* for April, 1919, entitled, "A Clinical Study of Psychoses characterised by Distressed Perplexity." The latest British manual of psychiatry he appears to have read is Clouston's 1904 edition of his *Mental Diseases*.

In the later chapters attention is directed to the fact that the thoughts of stuporose patients are invariably associated with death—not fear of death, but a desire to die or the delusion that they are dead or going to die. This implies retreat from the world of reality, being placed in a coffin, buried in the earth and so forth—all these being symbolic of a return to the mother's womb, as indeed is the stupor itself; but we doubt whether there is sufficient justification for going farther than this and supposing that the wish for re-birth lurks in the unconscious of the patient during the stupor, although the notion may consciously arise after recovery.

The work concludes with chapters on "The Diagnosis of Stupor," meaning the diagnosis of the psychosis to which the stupor belongs; the "Treatment of Stupor" and an admittedly incomplete chapter on "The Literature of Stupor."

To the young psychiatrist who has studied his text-books we recommend

a critical perusal of this study of stupor, although there are a good many other American works that would repay him better.

W. H. B. STODDART.

*The Morphological Aspect of Intelligence.* By SANTE NACCARATI, M.D., Sc.D., Ph.D. *Archives of Psychology*, No. 45. (New York, 1921. Pp. 44. Price: \$1.10.)

In looking for correlations between physical characteristics on the one hand, and intelligence on the other, Dr Naccarati concludes that, since intelligence is a highly complex quality, any physical quality that is correlative to it must also itself be complex. He, therefore, endeavours to correlate with intelligence, not simple measurements such as height or weight, but relative measurements, in the form of ratios or indices.

Following the criteria for so-called "morphological types," devised for clinical purposes by de Giovanni and Viola, he uses, in the first place, what he terms the "morphologic index," which may be briefly described as the ratio found by dividing the length of the limbs by the estimated volume of the trunk (obtained by multiplying measurements in three dimensions for the thorax and the abdomen respectively). As a rougher measure, he uses the simple ratio of height divided by weight. These indices, and the chief original measurements, he correlates with the intelligence of his subjects measured by such tests as the Thorndike group examination tests for college entrants.

He finds that with 75 students thus measured there is a correlation between intelligence on the one hand and the volume of the trunk on the other hand to the extent of  $-.36$ . This is the highest coefficient he has obtained: it suggests that the most intelligent students have trunks of the smallest volume. His morphologic index, indeed, yields a correlation not quite so high, namely  $+.356$ . The correlation between the ratio of height to weight, on the one hand, and the ratio of length of limbs to volume of trunk, on the other, is  $+.70$ ; and this (in his view) entitles him to use the former and simpler measurement. Using this measurement with 221 students he obtains a correlation between the ratio of height to weight and intelligence which, though small, is positive and significant, namely,  $+.228$ . The diagnostic value of the correlation is, he admits, not very great, since the individuals with the highest morphologic index are likely to be pathological subjects whose trunk has wasted in consequence of such diseases as tuberculosis. But, allowing for disturbing factors of this nature, he believes his data justify an important and suggestive conclusion, namely (as he puts it) that "the microsplanchnic type is hyper-evolute," or, in simpler language, that the man with the smaller trunk has the greatest intelligence. Both features he inclines to relate to the possession of an over-active thyroid.

CYRIL BURT.

*Strindberg und Van Gogh.* Versuch einer pathographischen Analyse unter Vergleichender Herausziehung von Swedenborg und Hölderlin. Von KARL JASPERS, Dr med., Professor der Philosophie an der Universität Heidelberg. (Arbeiten zur angewandten Psychiatrie hrsg. von Dr W. Morgenthaler, Priv.-Doz. an der Universität Bern, Bd. v.) Verlag Ernst Birchner Aktiengesellschaft, Bern. Preis: Fr. 6.

In this book, Strindberg's illness is discussed in a remarkably interesting manner, no opinion being given on his rank as a poet. That his mental peculiarities may stand out clearly, he is compared with three other eminent authors who suffered from the same disease: Swedenborg, who was of the same type as Strindberg, and Hölderlin and Van Gogh, who were by nature differently constituted. The results of the discussion are given in two chapters of great penetration, entitled "The Relation between Schizophrenia and Creative Work" and "Schizophrenia and the Culture of the Age." The observations on the connection of creative genius with the pathological, and the relation of our present cultural development to the abnormal, will be of not merely theoretical interest to all thinking people, but will help many to approach by a wholly new and original way certain vital and pressing problems.

*Handbuch psychologischer Hilfsmittel der psychiatrischen Diagnostik.* Aus der Sammlung des Instituts für angewandte Psychologie und aus der Literatur, edited by OTTO LIPMANN. Leipzig: Johann Ambrosius Barth, 1922.

The Psychiatric Section of the 16th International Medical Congress (Budapest, 1909) appointed a committee "to study normal psychic activities in their relation to psycho-pathological phenomena." This committee invited the *Institut für angewandte Psychologie* to cooperate in establishing a standard of normal values, in which task the handbook published this year by the Institute is intended to assist. The collection is confined to such psychological tests as have already been used, or at least proposed, for purposes of psychiatry and as are of value in the diagnosis of individual cases rather than in research into particular forms of disease. Max Isserlin, in an introductory paper on the nature and value of psychological expedients applicable to psychiatry, discusses at length the merits of "intuitive" and "objective" methods of psychological diagnosis, with special reference to the works of Kraepelin and Jaspers. There follows a note on the mode of arriving at normal values, the rest of the book consisting of a systematic collection of tests, with many illustrations and plates. An appendix contains various tables of tests and there is a full bibliography.

*Dreams and the Unconscious.* An Introduction to the Study of Psycho-Analysis. By C. W. VALENTINE, M.A. (Cantab.), D.Phil. (St Andrews), Professor of Education at the University of Birmingham. Christophers, 1921. Pp. 140.

Nobody who wishes to acquire any information about psycho-analysis need turn his attention to this book, for there is none to be found in it; but on those who, like the author, have heard or read a little about it and find it disagreeable and disquieting it may have a soothing effect.

An atmosphere of doubt and indecision pervades the whole book. This is partly due to the fact that the author does not know what psycho-analysis is or what is not psycho-analysis. This difficulty he has endeavoured to evade by "particularly trying to bring its doctrines into line with orthodox psychology" (p. 8)—a process which can serve no object but to undermine the influence of a new discovery by minimizing, depreciating, and ignoring all its specific contributions to our knowledge. It is one which, however, is psychologically interesting in that it appears to be exclusively characteristic of the "hypocritical English"; on the Continent, for instance, opposition to psycho-analysis is frank and outspoken, and no such ostensible compromises are met with as we find in Dr Valentine's book. This writer includes under psycho-analysis among other things, a kind of mental therapy (ab-reaction), known and practised long before psycho-analysis existed, from which all the peculiar characteristics of the psycho-analytic method are conspicuously absent; and also a technique which is probably as old as civilization itself, namely, moral persuasion and cheerful encouragement (p. 94, Cure of a case of war-shock by Dr Rivers). We are told that psycho-analysis "may proceed simply by talking over symptoms and their origins with the patient, trying to get him to probe his past for possible clues and in some cases suggesting possible explanations—a method obviously full of danger"; and that "*another* method of inquiry is the method of free association, in which the patient is encouraged to let his thoughts wander at will." The first is simply not psycho-analysis and the second does not describe it properly; in any case one would have thought that the practical objections to calling such diametrically opposed procedures by the same name would have been obvious.

The vagueness and uncertainty of the whole book is indescribable; there is hardly a sentence in it which is not expressed in hesitating terms. Thus we are told that the interpretation of a dream is "often best gained" by the one and only method, and that this process "sometimes" puts a different complexion on a dream; that there are "dreams on record which can be, partially at least, interpreted" in the Freudian sense; that a dream is "often" a means of guarding sleep and that this is "supposed to happen" under certain circumstances (whereas, though it may fail, it is the sole function of the dream); that an experienced psycho-analyst "can sometimes facilitate" the interpretation of a dream by a knowledge of "certain symbols fairly common in dreams"; also that "the dominant Freudian conception of dreams (so far as the dream has meaning at all) is," and so on. The author makes it perfectly clear that in his own view dreams have no meaning worth mentioning. "Even the latent content of some dreams is still somewhat trivial" (p. 89). "Much of the dream activity is probably due to chance associations of parts of the brain still partially active, and so many dreams may be of no real significance" (p. 114). It is quite evident from the author's attempts at analysis of one or two dreams of his own that he has not the faintest notion of penetrating beyond the fragments of quite conscious recollection of recent experience, often trivial, which are present in most dreams; and the reason why he cannot do so is also quite clear.

The reason is that a person cannot practise with any success a method in which he does not believe. "Unconscious mental process" is to the author a contradiction in terms; and he says "it is not necessary to regard unconscious desires and memories as similar to what we know as conscious experience" (p. 23). The psycho-analytic doctrine of the unconscious mind is here explicitly,



as it is throughout implicitly, completely set aside. Unconscious repression comes under the same ban. It is regarded by the author as a conscious process, or as a "habit which has become automatic" (p. 12). It is confounded with parental severity—a crude error with which we are now familiar—just as a "father (or mother) complex" is confounded with parental influence. There is not a word in the whole book to indicate that the author has ever heard of that corner-stone of psycho-analytic knowledge, the infantile attitude towards the parents, which we call the Oedipus complex.

Very little further examination suffices to show us why the author does not understand anything about psycho-analysis, or believe in it. It is the total absence in him of a scientific attitude of mind towards this subject. His whole interest is clearly directed to the question of what is moral, of what is "good" or "bad," in the various phenomena discussed. Pages are devoted to the discussion of "whether repressions are harmful"—a question that is futile, for it cannot be answered; it depends upon the nature and degree of the repression. He is thus prevented from recognizing the existence of it as a fact. This comes out most clearly in what he says about sublimation; the distressing notion that a sexual impulse, even in the broadest, most inclusive interpretation of the word, can have any sort of connection with art or religion or sport or work leads him to "suggest" with quite pathetic eagerness, alternative hypotheses, including "a specific impulse towards *crime*"—surely a new departure even for orthodox psychology. Finally, great anxiety is shown throughout that conclusions drawn from "persons suffering from nervous disorder" should not be applied to "normal" persons; for "abnormal sex experiences are a frequent cause of nervous trouble."

We have treated this book at some length because it shows in a glaring manner all the defects characteristic of the stream of little manuals on psycho-analysis now being published.

JOAN RIVIERE.

*Functional Nervous Disorders.* By DONALD CORE, M.D. (Manc.), M.R.C.P. (John Wright & Sons, Ltd. 8vo. Pp. xvii + 371.)

Dr Core has produced a very weighty volume in the best sense of the word, and the printers have followed suit in the literal sense. Presumably there is an economic reason for making books inordinately heavy, but the fashion does not commend itself to the reader.

Dr Core is no traditionalist—in fact, he is a good deal of an iconoclast. He has set out to establish a classification of functional nervous disorders that is completely his own, and to build thereon a complete system of diagnosis, prognosis and treatment. On the one hand, he has little to say about the somatic factor in aetiology, and on the other he has rather a short way with the psycho-analysts. But it must not be supposed that his criticisms are shallow or trivial; and, on the principle that fleas are good for dogs, all analysts—psycho- or otherwise—should read this book. The author is at pains to condemn the tendency towards "empirical interpretation of dream incidents" (p. 256); and in this respect he considers that "the work of Jung and his followers must be considered as an advancement on the purely Freudian conceptions." Again, with regard to the *libido*, he refers to "the primitive, undifferentiated, emotional 'driving force,' academically, and I think un-

justifiably, christened by the Vienna school as 'sexual' in a special sense" (p. 262). And again, on p. 271, he says, "Unfortunately the exponents of the Vienna school...invariably give the impression in their published works of sexuality in the limited sense, and generally in a very limited sense indeed."

These extracts will suffice to show that, although a good deal of space is devoted to dream interpretation, Dr Core maintains a very complete detachment from the analytical standpoint. In this matter, as in all others, Dr Core is free from any taint of diffidence or uncertainty. In fact, some hypercritical reader might even suggest that he is free from any taint of modesty: for the book is characterised throughout by a tone of assurance, if not of dogmatism, which would be more suitable to-day in a work on electricity than in one on functional nervous disorders. This is rendered a degree more noticeable than it might be by the highly theoretical character of the book; no examples to speak of are cited, and one cannot help wishing that Dr Core had taken the trouble to quote cases in order to elucidate his meaning, even if he considered them unnecessary to corroborate his statements.

If, however, the student makes a successful adjustment to these minor blemishes, he will find in this book a mass of suggestive and stimulating material. Whether he agree with Dr Core in the main, or whether he differ from him totally, or whether, like the present writer, he feel impelled to further study, he cannot fail to carry from it into his practice a very arresting clinical scheme, worked out with minute elaboration, and adhered to consistently. Probably the most satisfactory way of indicating the character of this volume is to quote *in extenso* from the preface this classification:

#### A. *Regressive.*

##### Hysteria.

1. Symptoms arising in the atmosphere of a recrudesced emotional tone and associated with behaviour determined in the atmosphere of an analogous emotional tone in early life characterised by an abnormal absence of control: *Primary hysteria*.

2. Symptoms arising in an atmosphere associated with discomfort in the broadest sense in any part of the body: *Secondary hysteria*.

3. Symptoms arising in the atmosphere of expectation:

(a) Of discomfort in any part of the body.

(b) Of symptoms or abnormal behaviour generally, determined at inception by any of the preceding mechanisms: *Tertiary hysteria*.

(*The Hyperthymic State*. This, as mentioned above, does not in itself constitute a functional nervous disorder; but it requires consideration on account of its influence upon certain of these disabilities. According as to whether the individual has never acquired emotional control in normal intensity, or has at one time acquired such control, the hyperthymic state may be referred to as *primary* or *secondary* respectively.

There is no standard of hyperthymia; it may be defined as the condition of any individual whose degree of emotional control is less than the normal for the community in which he lives.)

#### B. *Progressive.*

The sympathetic functional nervous disorders.

1. Symptoms arising in the atmosphere of an emotional tone, the appropriate conative aspect of which is prevented from developing: the *instinct distortion neuroses* or *dysthymias*:

(a) *Confusional* or '*centrifugal*' dysthymia.

(b) *Introspective* or '*centripetal*' dysthymia.

2. Symptoms arising in the atmosphere of dread: the *memory- or mnemo-neuroses*:  
 (a) The elements of the dread are logical; readily understandable by the patient and the generality of mankind: the *ordinary form of the memory-neurosis*.  
 (b) Illogical dread, the elements of which are entirely incomprehensible to the patient: the *obsessive form of the memory-neurosis*.

In general Dr Core's work is much more akin to the French outlook in clinical psychology than to the analytical, but it is work of an unusually high character on which he merits our warmest congratulations.

H. CRICHTON MILLER.

*The Care of the Adolescent Girl.* By PHYLLIS BLANCHARD, PH.D. (Kegan Paul, Trench, Trubner & Co. Ltd, 1921. Pp. xxi + 201. Price: 7s. 6d.)

This book deals with the problem of the adolescent girl from a psychological and philosophical standpoint; the author is actuated by a high ideal of womanhood, and by the obvious need in the present day for adjustment in the education and upbringing of girls.

She leads up to the main theme of her subject by reviewing various philosophical and psychological theories as a background to Freud's conception of the unconscious; in comparing this with the idea of the 'subconscious' formulated by von Hartmann, she omits to point out the fundamental difference in the two theories, which rests on the Freudian doctrine of repression.

Dr Blanchard's attitude to Freudian psychology is inconsistent, and it is easy to show that she has not a clear insight into the theoretical principles; on the other hand, when quoting records of cases, her comments and explanations are based for the most part on Freudian conceptions.

There are a number of inaccuracies and ambiguities in the text, for example the author professes to use Freud's phraseology when stating that 'a suppressed sexual impulse' 'had become displaced from the conscious to the subconscious strata of the nervous system.' This mingling of psychical and physical terms occurs several times, and suggests a lack of appreciation of the mind as a psychic entity, in which the unconscious plays the larger part and has no defined relationship to 'strata of the nervous system.' Again, she states that Freud's theory of *libido* is the 'simple statement that the motivating principle of all human activity is the procreative instinct'; this is untrue, and it is difficult to reconcile it with an understanding of the theory of repression and mental conflict as a cause of the psychoneuroses. It is amazing that the work of the Freudian school on the ego-instincts should still be ignored.

A further confusion of mental and physical processes is revealed in the description of sublimation as a process in which 'the energy of the libido is transmitted into higher nervous processes, and traversing neural pathways of association, reinforces the aesthetic creative impulses' etc.: psychoanalysis has shown that the aesthetic creative impulse is a sublimation of the sexual instinct, and is not merely reinforced by it. The author appears to use 'higher' in the sense of intellectual, in distinction to physical, as later on she speaks of libido as becoming 'converted downwards' and producing physical symptoms.

In dealing with the views of Maeder on the intuitive impulses of the unconscious the author holds that the ultimate salvation of humanity rests in

its power to follow these impulses. Exactly what is the relation of these intuitive impulses to the sexual instinct, which matures at adolescence, is not clear; apparently "the adolescent girl is unduly sensitive to this strange force within her being, because to her, much more than to her brother, is given the serious mission of transmitting it intact to succeeding generations." This 'strange force' seems to be a possession of the ovum rather than of the spermatozoa, and to be associated with a greater capacity for self-sacrifice and altruism; so far it has escaped scientific observation.

Dr Blanchard adopts Benjamin Kidd's ideal of women and in her enthusiasm for the sex wanders away from the reality revealed by psycho-analytical research to an ideal feminine personality, which suggests psychologically a masochistic goddess. To accept a position for the larger section of the community, which involves a 'bitter conflict' in adolescence, and subsequently a life of self-sacrifice, is unthinkable in an age of progress and freedom. The procreative act should have pleasure for the woman as well as for the man, and the self-sacrifice of maternity is only one aspect, which in itself brings gratification. Masochistic gratification is referred to in a later chapter, but is lost sight of in the preliminary discussion.

The chapter on the sex instinct contains some interesting reports given by a number of adolescent girls in answer to questions concerning day-dreams, erotic dreams, menstruation, etc.; the reader is struck by the absence of adequate sex knowledge shown, and the feeling of inferiority accompanying menstruation. The maternal component of the sexual instinct is obviously subservient at this stage; the author suggests that the modern girl is beginning to choose for her husband the man whom she wants to see as the father of her children. This statement does not bear closer investigation.

When dealing with the adolescent conflict, the author states that 'with the onset of pubescence and the beginning of menstruation, there is first brought into the focus of consciousness the radical difference between the male and female organisms, a fact which has hitherto been little considered by the girlish mind.' This conclusion has been proved to be erroneous countless times by psycho-analysts; a radical difference in the male and female is recognised in the first few years by the average child, and the repressed and unexplained recognition is intimately concerned with the adolescent conflict under discussion. The cases reported, with their well-marked feeling of inferiority demonstrate the truth of this observation; the author, however, adopts Adler's view and considers the masculine protest against organ inferiority as the psychological explanation.

Dr Blanchard shows a clearer and less hampered view of her subject when she touches on the relation of religion and art to sublimation, and recalls the primitive forms of worship and the origin of magic.

In the following chapter she quotes several interesting records of neurotic cases with analytical annotations, showing their dependence on anomalies in sexual development. It is an error to describe the transference of affection in adolescence to one of the same sex as a 'passing perversion,' for a homosexual transference of libido in adolescence represents a normal stage of development. There is confusion again in a reference to ambivalent forms of the Oedipus complex, by which the author appears to mean the transference of positive feelings to one parent, and negative to the other. This suggests that the significance of the term 'ambivalent' is not clear to her. A further statement, which cannot be overlooked, is to the effect that certain extremists



among psycho-analysts 'gravely urge' that 'the adolescent girl who finds the problem of controlling and sublimating her impulses too arduous, be allowed full satisfaction of the sexual instinct on the biological level.' It would be interesting to know to what school these analysts belong, for it is an untrue assertion of those who, using Freud's technique and accepting his theories, have the actual right to be called psycho-analysts. Such recommendations recall the 'wild analysis' described and condemned by Freud.

In spite of the numerous unsound and inconsistent statements which appear in the book, there is also truth and insight, and the reader is left with the impression that the aim of the author is more convincing than the means advocated to attain her end. She says, 'the adolescent girl's rebellion against the influences which tend to cramp her development is misguided by the adoption of a false set of standards, so that instead of seeking an expression of her own peculiar nature, and making her own unique contribution to the race, she has sometimes attempted to follow the man-made path instead of blazing the trail for herself.' The truth is obvious, but the evil is not rectified by preaching a doctrine of self-sacrifice on the one hand, and on the other hinting at a 'higher mission of guiding a civilisation that has been too long in the hands of men.'

At present hard and fast rules cannot be formulated for the upbringing of the child and adolescent, but many pitfalls will be avoided by early sex enlightenment, the avoidance of unequal treatment of the sexes in childhood, and the encouragement of a view of sexuality which unites the ideal and the physical; these principles combined with increased opportunities for sublimation and work for the welfare of the community should help to mitigate the conflict of adolescence, which tends to warp and impoverish the developing personality.

SYLVIA M. PAYNE.

## NOTES ON RECENT PERIODICALS.

*Journal of Mental Science*, July, 1921.

Both of the original articles in this number are from the hand of Sir Frederick Mott, the Morison Lectures on the Psycho-pathology of Puberty and Adolescence, and the second Maudsley Lecture which, apart from a short historical account of the Maudsley Hospital, is devoted to Sir Frederick Mott's recent researches on dementia praecox.

Both the Morison and the Maudsley Lectures deal almost entirely with Sir Frederick Mott's recent histological and biochemical researches in the changes in the sexual glands and central nervous system in cases of dementia praecox and congenital imbecility. In both conditions more or less regressive atrophy of the testes and ovary has been found in the great majority of cases examined, associated with arrest of spermatogenesis, on the one hand, and of maturation of the Graafian follicles on the other. In the central nervous system there is evidence of primary parenchymatous degeneration of neurones with glia cell proliferation. Researches into the bio-chemistry of the central nervous system in these diseases give evidence of diminution of neutral sulphur showing general inherent deficiency of oxidation processes, also a deficiency of organic phosphorus which may be correlated with the evidence of failure of nuclear phosphorus in the reproductive organs.

The regressive atrophy of ovaries and testes is not considered as the primary change in dementia praecox; Sir Frederick Mott considers that in this disease and in congenital imbecility there is evidence of a failure of vital energy of the cells of the whole body, manifested especially in the two most important to show symptoms, namely, the closely inter-related sexual organs and the brain. For the author mental processes are considered as subordinate to physiological processes and mental disorders are due to pathological physiogenic conditions.

*Journal of Mental Science*, October, 1921.

This number opens with an Obituary Notice by Dr Percy Smith of Sir George Savage, of whom there is also an excellent photograph. Dr Percy Smith has brought wide personal knowledge and heartfelt esteem to the writing of this article: it is a record of a good life well and fully lived.

Amongst the original articles the Presidential Address to the Medico-Psychological Association by Dr C. Hubert Bond is worthy of very careful study. Taking as his subject, "The Position of Psychological Medicine in Medical and Allied Services," Dr Bond sets out clearly the present legal restrictions in the treatment of mental disorders and the deficiencies and obstacles to progress. The need for the extension of the system of voluntary admission to county and borough asylums is first dealt with, followed by a short outline of the difficulties of defining certifiability, and the vagueness of uncertifiability as a guide to arrangements for treatment. The position is well summed up in the following sentence: "The truth is that against possible unauthorised detention, whether for personal profit or—as is much more likely—for the sake of carrying on treatment, the real protection, apart from the ordinary Common Law remedies, is not in forms and procedures, but in supervision (facility for inquiry and visitation) and power to take such action as seems called for at the hands of those who have the requisite experience and independence." Emphasis is laid upon the urgent need for amendment of the existing Lunacy Laws, to enable cases of acute and curable forms of mental illness to be treated for a probationary period of at least six months without the necessity for certification.

The second part of the paper is devoted to a consideration of the Report of the Consultation Council on Medical and Allied Services established under the Ministry of Health Act of 1919, which, as Dr Bond suggests, "affords a reasonably secure basis

on which we can formulate suggestions to meet any special facilities demanded for preventive, curative and eustodial treatment of mental and allied disorders. To those, more noisy perhaps than numerous, for whom the Board of Control stands for all that is reactionary and inhuman, the breadth and wisdom of the reforms advocated by Dr Bond may perhaps make for enlightenment.

The remainder of this number of the *Journal* is devoted to four short papers read at the Annual Meeting of the Medico-Psychological Association, 1921. "The Problem of the Feeble-minded in South Africa," by Dr J. T. Dunston, is mainly devoted to administrative legislation and statistical considerations. Special reference is made to the Mental Disorders Act of 1916, which embodies very definite advances and far-reaching reforms. Interesting reference is made to the incidents of feeble-mindedness amongst the native populations of South Africa; referring to mental disorders the writer states that he has never seen, and, within his knowledge, no single case of true paranoia has been reported, amongst the native population.

"Mental Hygiene and Prophylaxis in France," by Dr H. Colin, deals also mainly with administrative and legislative problems. In France apparently, new legislation to place the treatment of mental disorders in line with modern requirements is still some way from the Statute Book. La Ligue d'Hygiène Mentale, founded in December, 1920, is apparently the centre for propaganda work for the initiation of much-needed reform.

"Legislative Restriction in connection with the Treatment of Incipient Insanity," by Dr Wilfrid Corden, Barcelona. This paper may be adequately summed up in one short extract. Lunacy Law in Spain "embodies all that red tape can do to hinder proper treatment of cases, and it presents therefore a problem which reaches a climax of complexity."

"The School Medical Service in Relation to Mental Defect," by Dr G. A. Auden. A presentation of the case of the school medical officer in relation to a unification of the Medical Services which deal with the various aspects of mental defects. The author emphasises the need for psycho-educational clinics for the examination of all children presenting abnormalities of educational progress or of conduct.

M. B. W.

*Journal für Psychologie und Neurologie* (Vol. xxvi).

Nos. 1 and 2. October, 1920.

O. L. Forel's psychological study, "Le Rythme," should be of interest to physicians who have been struck by the great, largely subconscious, influence of rhythm on the mind. He traces through different departments of individual and social life the various ramifications of rhythm, endeavouring to relate them to one another and to arrive at a synthetic presentation of the subject. The study falls into three parts: (1) physical and psycho-physiological rhythms, (2) rhythm in work and play; rhythm in music, (3) experimental data on the phenomena of rhythm; therapeutic considerations.

Dr H. Preisig contributes a paper on "Malformations de la moëlle épinière," in which he gives a detailed account of the case of a child suffering from multiple malformations. Appended is a plate showing sections.

E. Grünwald (Freiburg Nervenklīnik) writes on infantile spastic paralysis illustrated by the case of two brothers in whom this disease occurred.

Nos. 3 and 4. January, 1921.

This double number contains the following papers: "On the histopathology and pathogenesis of amaurotic idiocy with special reference to changes occurring in the cerebellum," by Max Bielschowsky, illustrated by five double plates. "Localisation in the nerve centres of the optic muscles. Two as yet unknown centres in the human mid-brain," being an account of certain laboratory experiments by Dr Casimir Frank in the neurological clinic in Rome (illustrated).

Nos. 5 and 6. April, 1921.

The only article on human psychology is contributed by E. Beck on the subject of military misdemeanours during the war. He gives statistics of all such misdemeanours as are recorded of two regiments of Bavarian infantry, his diagrams showing that the number of delinquencies varied directly with the strain of long service. In an account of over a hundred cases observed by him in a field hospital he distinguishes psychopaths, feeble-minded, constitutional neuropaths and men suffering from war neuroses, and describes the type of misdemeanour and the character of the previous military record commonly met with in individuals of the different groups. He concludes his article with a note on the high proportion of misdemeanours committed by natives of the Palatinate, which he attributes partly to their natural temperament and partly to their proneness to alcoholism.

The rest of the number is devoted to papers dealing with experiments on carrier pigeons and on dogs.

Vol. XXVI.

Nos. 1 and 2. September, 1921.

This number contains the following papers: "Critical Notes," by O. Vogt, on the principles of the training of dogs; "Contribution to the theory of hereditary degeneration of the cerebellum," by K. Schaffer, illustrated by diagrams and plates. "On the nature and physiological significance of yawning," by Valentin Dimpert.

Nos. 3 and 4. January, 1922.

"The Dream as a Phenomenon of the Lowering of Consciousness," by Dr A. J. Kiewiet de Jonge. The author's thesis is that the dream and its peculiar characteristics may be explained quite simply as the result of a lowering in the degree of consciousness during sleep: that degree must be high enough for us to perceive the dream-images, but too low for external stimuli to wake us. As the level of consciousness sinks, memory-pictures gain in visual intensity and there is a corresponding decrease in correct perception of the external world. Thus we pass from true perception to illusion and finally to hallucination. The author expressly refrains from a direct criticism of Freud's theory of the dream, but on various points he would seem to differ fundamentally from Freud. Our forgetting of dreams is to be attributed to the weakness of impressions received in a low degree of consciousness; bizzarreries and absurdities to the superficiality of association in that state. Considering the dream of "the burning child," quoted by Freud, he repudiates the idea that the father's vision of his dead child as alive was a wish-fulfilment; rather it was due to the fact that our lowered consciousness assimilates more easily insignificant impressions running in familiar channels than impressions of great affective value which have not yet been taken up into the mental content. He rejects the Freudian conception of the censor, on the ground that the most shameless wishes make their way into our dreams. Other points touched on are the duration of dreams, symbolism, anxiety dreams and morality in dreams.

"Psychogermination (connection between imagination and character-dispositions)," by Dr Valentine Ujhely. We have here a sketch, in English, of a system of laboratory experiments for the purpose of diagnosing certain latent faculties and dispositions of the individual. The operator "engraves" upon the mind of the subject a series of ideas, which are discharged by the latter, in an artificially induced hypnoidal state, through a stream of subconscious associations. The result of this "psychogermination" is taken to show to which of several categories the character of the subject is to be assigned.

In a paper on the extra-pyramidal symptom-complex, Dr H. Zingerle gives a detailed account, illustrated by photographs, of cases which have come under his observation.



No. 5. February, 1922.

Valentin Dumpert, in a critical discussion on the so-called "finger-thumb reflex," to which attention was drawn by C. Mayer during the war, concludes that this is not a true reflex, but a "muscular co-ordination." A short paper on the biological significance of such a co-ordination is appended.

Dr Hans Berger-Jena gives the results of a series of experiments to register the effect of psychic influences on the temperature of the skin. A distinct rise of temperature was noted as a result of (a) direct hypnotic suggestion, (b) strenuous intellectual work, (c) strong emotion, (d) concentration of the subject's attention on the temperature of the skin at a given point.

August Forel elaborates and defends his hypothesis of "Psychenergie" as an explanation of clairvoyance and telepathy. (Cf. A. Forel, *Der Hypnotismus*, 1918, pp. 54-65.)

Otto Schlicke contributes a paper on certain reactions to be observed in dogs in the course of experiments in training.

*Annales Médico-Psychologiques* (Series XI, vol. II).

No. 1. June, 1921.

*Danger résultant de l'aliénation mentale chez les employés de chemin de fer.* (M. F. Pactet.)

Calls attention to the large number of railway accidents and the fact that employées are often retained in the service long after their mental condition has made them a source of danger to the travelling public—gives three examples and argues that mental examination is necessary.

*Les mélancoliques anxieux persécutés* (1). (M. André Ceillier.) (Completed in No. 2.)

A long article containing records of five cases—contends that the term *mélancolique persécuté* is used far too loosely and suggests that the term *mélancoliques anxieux persécutés* be confined to those who suffer from ideas of persecution unaccompanied by ideas of guilt but caused directly by the anxiety state.

*Un testament de persécuté.* (Drs Levet et Vernet.)

A case in which the courts upheld the validity of a will in opposition to the medical evidence of insanity.

*L'aboulie du neurasthénique d'après une auto-observation* (1). (M. Roger Dupouy.) (Continued and completed in Nos. 2 and 4.)

A long *auto-observation* of a student who broke down some time before an important examination and attempted suicide, then suddenly recovered and passed the examination with distinction but immediately after relapsed into a far worse mental state. The danger of allowing the wish to drive the body beyond its power of endurance is emphasised. The "doubling of the wish" is able to make up for shortage of power until the day when, exhausted by effort, beaten by difficulty of the task, the wish does not carry power with it and complete collapse ensues.

*La tension artérielle habituelle chez les mélancoliques anxieux.* (M. G. Maudascher.)

Presents tabular statements for 24 cases and concludes that the anxiety is neither the cause nor consequence of hypertension.

No. 2. July, 1921.

*Les mélancoliques anxieux persécutés* (2). (M. André Ceillier.)

See No. 1 above.

*L'aboulie du neurasthénique d'après une auto-observation* (2). (M. Roger Dupouy.)

See No. 1 above.

*Note complémentaire sur le traitement de l'épilepsie par la phényléthylmalonylurée.* (M. Maurice Ducosté.)

Refers back to a preliminary note on the use of luminal in epilepsy (*Ann. Med.-Psych.* X.T. XII, 1920, p. 433) discusses the use of Luminal and Gardenal in epilepsy and reaches the conclusion that in Phenylethylmalonylurea with Belladonna and Caffeine we have the best form of treatment of epilepsy. The paper is followed by a lengthy discussion on the relative value of various drugs in the treatment of epilepsy.

*Quatre cas d'acidose chez des mélancoliques.* (Mlle M. Badonncl.)

Concludes that acidosis and anxiety are not cause and effect.

*Variations de la pression artérielle d'après certains états émotifs.* (MM. G. Naudascher et E. Mortimor.)

Concludes that the emotional state and pressure variations are simultaneous results of disturbance in the sympathetic system.

#### No. 3. October, 1921.

*Le service d'anthropologie pénitentiaire belge.* (Dr Werner Hoedemakers.)

An interesting account of a valuable Belgian experiment on the classification of delinquents by mental experts, followed by differential treatment with a view to reinstating many as useful members of society. The central idea in the scheme for reclamation is that the delinquent should work during his imprisonment for money to indemnify the injured party, to provide support for his family or to be given to him on liberation.

*Les conséquences de la loi de réforme et pensions du 31 Mars, 1919 dans le domaine des maladies mentales.* (Dr Henri Colin et Dr E. Minkowski.)

Nine outstanding cases in which the law occasioned unfair treatment are given. There should be rigorous discrimination between troubles congenital or pre-war and those acquired or aggravated during service with the colours.

*Un cas de délire télépathique.* (Dr A. Starobinski.)

Describes the case and argues that human personality is a psycho-organic machine, affective or instinctive, whose energy is canalised and directed by an ethico-logical governor imposed by society. In neuro-pathological subjects however the governor is too weak and allows energy to escape into new channels which with every repetition of the delirium become more and more fixed.

*Les tendances et l'esprit du code civil allemand en matière psychiatrique.* (Dr Maurice Brissot.)

Deals with difficulties arising from the continued operation of German law in Alsace.

*Psychose hallucinatoire chronique.* (Dr Maurice Brissot.)

Ideas of negation proceed from those of persecution and lead to ideas of grandeur.

*Mélancolie anxieuse et syndrome de Basedow.* (Dr Maurice Brissot.)

*Dissociation psycho-organique, intermittences et périodicité au cours de l'évolution des formes mentales prolongées de l'encéphalite épidémique.* (M. Georges Petit.)

The early stages in which the symptoms are purely psychical would seem to be a "signal of alarm."

*XXVe Congrès des aliénistes et neurologistes de France et des pays de langue française* (I). (M. Louis Parant.) (Concluded in No. 4.)

A brief resumé of the proceedings.

#### No. 4. November, 1921.

*La conférence de Nicolas Sténon sur l'anatomie du cerveau. L'esprit scientifique moderne au xvii<sup>e</sup> siècle.* (M. Paul Sainton.)

An appreciative review of pioneer work on the structure of the brain.

*Aliénation mentale et loi du 31 Mars, 1919 sur les pensions militaires.* (M. P. Beaussart.)

*L'aboulie du neurasthénique d'après une auto-observation* (3). (M. Roger Dupouy.)

See No. 1 above.

*Insuffisance hépato-rénale et altérations sanguines dans la mélancolie.* (M. René Targowla et Mlle Badonnel.)

A brief résumé of previous work with bibliography, followed by accounts of eight recent cases.

*Hallucinations lilliputiennes au cours de la démence.* (M. A. Prince.)

Three very different cases described.

No. 5. December, 1921.

*Folie, crime et alcool.* (Dr Legrain.)

An argument for abstinence now and prohibition later concluding—"Against a force as destructive as alcohol would it be possible to secure prohibition? The United States has replied: the asylums are empty."

*Les séquestrations volontaires et les psychoses de la liberté.* (M. Paul Courbon.)

Two cases—happy, well behaved, hard working and apparently normal in detention but suffering violent relapse on release.

*Le manie chronique.* (M. Franco da Rocha.)

Agrees with Esposito in criticising Specht and holding that although mania and melancholia may periodically present states of delirium resembling the delirium of paranoia they can be readily distinguished from it.

*Traitement des états mélancoliques par le cacodylate de soude à haute doses.* (MM. Rogues de Fursac et Abély (Xavier).)

*Paralyse générale et traumatisme.* (MM. Pactet et Robin.)

*Conscience partielle et amnésie retardée dans les "absences" épileptiques.* (M. E. Mortimor.)

*L'expertise mentale. Les "circonstances atténuantes" d'ordre psychique.* (Dr Hamel.)

R. J. B.

## CORRESPONDENCE.

VIENNA, *January 18th, 1922.*

[Translation.]

THE EDITOR, *The British Journal of Psychology* (Medical Section).

DEAR SIR,

I write with reference to a review of *A Young Girl's Diary*, prefaced with a letter by Siegmund Freud, translated from the German by Eden and Cedar Paul, 1921—a review by Mr Cyril Burt. Since I was the editor of the *Tagebuch eines halbwüchsigen Mädchens*, Psychoanalyt. Verlag, Quellschriften zur seelischen Entwicklung, No. 1, I venture to hope that you will be good enough to publish the subjoined reply in your esteemed *Journal*:

1. As a person whose name is well known in the field of psycho-analytical research, and as one who has the honour of Prof. Freud's acquaintance, I give my direct assurance that *the Diary is a genuine record, and that it was printed without alterations*. The only reservations this statement requires are that the names of persons and places were changed and a modification was made as to the status of the diarist's father—simply in order to conceal the identity of the writer.

2. The natural developmental changes shown in the record during the three and a half years for which the diary was kept, have left absolutely no doubt in my mind that the entries were actually made *at the time of the experiences which are noted* and that they were not posted up from memory at some subsequent date.

3. For the rest, I may refer to the Preface to the third German edition of the *Tagebuch* (now in the press). Here I give concerning the diarist certain details likely to be of value to those who use the book for purposes of serious study. I also discuss certain criticisms. Finally, I assume entire responsibility for the authenticity of the record.

With sincere respect, I remain,

Yours faithfully,

[Dr] HERMINE HUG-HELLMUTH.

## COMMENTS BY MR BURT.

Dr Hug-Hellmuth's assurances that she herself was the editor of the *Tagebuch*, and that, judging from the development shown by the record, she believes the entries to have been actually made at the time of the experiences which they describe, will be very welcome to the readers of the diary, as they certainly are to its reviewer. All who have read its pages will look forward with the greatest interest to the additional details she has now been persuaded to communicate in the forthcoming edition of the book.

After forming his impressions of the diary, the reviewer wrote to Dr Hug-Hellmuth. Owing, however, to her absence in Berlin, she was unable to reply until the review had been set up in type. She was then good enough to write at length; and, in answer to certain specific questions, stated that both the diarist and the diary were now unhappily inaccessible; she explained that the original of the diary had been destroyed, and that the editor's own manuscript



copy alone was in existence; that the editor had not become acquainted with the diarist until the girl was 19 years old, and that she had not received the diary until the girl was 21. Certain details which she disclosed as to the subsequent history of the girl confirmed, at least in the mind of the reviewer, the suspicion that the girl herself was of an emotional disposition and of a somewhat unusual temperament. Since throughout her letter Dr Hug-Hellmuth referred to the editor of the book as a third person who desired (for certain natural reasons) to withhold her name, the standing of the editor still remained unknown; Dr Hug-Hellmuth, however, added that the editor "affirmed, in view of the marked changes in the handwriting, that the diary was not written retrospectively."

These further details, based as it seemed chiefly on indirect information and recollected impressions, seemed to call for no serious modification in the discussion of the volume, particularly as that discussion was already in page-proof; the reviewer, however, recorded them in a later notice of the book in another periodical.

It is hardly necessary to repeat what has been sufficiently emphasised in the review itself, namely, that never for a moment was it the reviewer's intention to cast any doubt either upon the good faith of the editor, or, indeed, upon the value and interest of the general substance of the book.

CYRIL BURT.

THE CONSTITUENTS OF THE UNCONSCIOUS<sup>1</sup>.

BY LEONARD WILLIAMS.

AMONG the large number of those who now interest themselves in psychology there is, or has been, an impression, amounting almost to an article of faith, that the operations of the mind are independent of physical phenomena. Not only is this impression an erroneous one, but it is almost the exact reverse of the truth; for the operations of the mind are dependent both actually and potentially upon causes which are primarily physical. By this I do not mean merely such obvious considerations as that circulating blood is necessary to the process of thinking. I mean that mind itself is primarily physical, and that what we call conscious thought is, in its inception, action, and make up, fundamentally physical and chemical. In order to consider the matter from this point of view we must divest ourselves of the fallacy that the brain is the exclusive seat of the mind. On looking back through the ages it is not difficult to realise that mind must have existed in the scale of evolution not only before man was moulded, but even before the vertebrates emerged. The ganglionic cells which constituted the nervous system of the invertebrates were the ancestors of our sympathetic or autonomous nervous system. These ganglion cells were the organs of a mind—a very rudimentary mind no doubt, but nevertheless quite adequate and effective so far as the needs of its possessor were concerned. Now this primitive nervous system was the anatomical representation of the primitive mind which controlled breathing, circulation, feeding, excretion and reproduction. And the curious and interesting thing is that this association was never disturbed by the intricate processes involved in the elaboration of the genus homo. The ganglion cells of our sympathetic system of nerves are the lineal descendants of the primitive ganglion cells of the invertebrates, and they continue to exercise a sway, now become to some extent, but not entirely, automatic, over the important and complicated viscera which are concealed in the human chest and abdomen. In the scale of evolution the brain and higher centres of the spinal cord are mere mushroom growths compared to our visceral ganglia and their offshoots. Closely connected with these ganglia in

<sup>1</sup> Read before the Medical Section of the British Psychological Society. Feb. 22, 1922.  
J. of Psych. (Med. Sect.) 11

their influence upon the primitive physiological organs of respiration and the like, and practically co-eval with them, are the glands of internal secretion, the ductless glands, or endocrine glands, as they are called. These glands must thus be considered as an integral portion of the primal thinking apparatus, the apparatus that is, which originally developed the plan of receiving an impression and responding thereto by an act, which, by constant repetition, became customary or automatic. If, for instance, you inadvertently touch an object which is very hot, you remove your hand with great rapidity, long before the sense of undue heat has reached your consciousness. You are then performing what used to be called an "acquired reflex." The reflex was originated millions of years ago by the rudimentary mind of our invertebrate ancestors, and the working of this mind in this particular instance dictated the same withdrawing act with such constancy as to stereotype it, and cause it to become purely automatic or unconscious. Now, the whole of our animal physiological life is dominated by this so-called vegetative system. It is a scheme of things which has been built up bit by bit from very small beginnings, and we represent the ultimate or residuary legatees thereof. This system is to us axiomatic. Without it we could have no existence, and every variation in it, is full of vital significance. That we have, on this foundation, succeeded in erecting a superstructure called a brain which enables us to think, and to reason consciously, and on a higher scale, must not blind us to the existence and essential character of the foundation, must not lure us into the flattering fallacy that there is something transcendental about the operations of the mind. A large part of this superstructure of brain and spinal cord—the central nervous system as it is called—is concerned with motion and common sensation, and a small part only with what is called thought, reason, intellect, and their consequences, conduct and character. And even these last, empyrean as they may seem, are almost entirely dependent upon causes which are purely animal and chemical. Talleyrand said "*L'homme est une intelligence contrariée par des organes*" (Man is an intelligence worried by viscera). The old reprobate probably spoke truer than he knew, for man is not intelligent unless his viscera are working in harmony. Viscera, whose workings are unconscious, are his essentials; conscious mind and intellect, his decorations. Discord among the viscera immediately suspends in him any intellect which he may previously have possessed. A fright, a fever in his blood, a pain in his abdomen, at once reduces him to a primitive automatic, cosmic thing, bereft of reason, and with no language but a cry. This merely means that in such cases

his conscious mind is in abeyance, in order that the automatic or unconscious mind, which is the older, the more experienced and the more reliable partner, may take undisturbed control. Nor is it merely in acute disturbances that we can watch the automatic mind at work. Arbuthnot Lane has shown us how, in order to counteract undue mechanical strains in the adult skeleton, supporting bands of considerable complexity in design and structure are developed. These reinforcements are conceived, and their construction superintended, by the unconscious mind working through the autonomous nervous system, which thus proves itself to be not only the elder and more experienced partner, but by far the more efficient and effective. It gets things done. Whereas we know that the brain and central nervous system, with all their thought, are incapable of adding a cubit to the stature.

And, although the workings of the unconscious mind in matters purely material and mechanical, such as the examples furnished by Arbuthnot Lane, are sufficiently convincing—there are others such as the hypertrophy of organs in response to a special demand—it must not be supposed that evidence is wanting in the region of the purely psychical. How else are we to understand and explain the phenomena of intuition, the process by which people, chiefly women, arrive at a correct conclusion by a jump as it were? Such people tell you they know. They cannot tell you how they know, but they know. And the devil of it is, they do know. The reason is of course that the primitive, the visceral, the unconscious mind gives information to the conscious, and like the experienced judge, it announces its conclusions but withholds its reasons.

Now this unconscious mind which initiates and directs purposeful acts of great complexity, and arrives at conclusions with extraordinary accuracy, resides in what is called the vegetative system. The vegetative system consists of the viscera, the ganglion nerve cells and the ductless glands. The members of this system are not present to our consciousness, but when necessary they can obtrude themselves into our consciousness vigorously and with insistence. Hunger, and the desire to void urine or faeces, afford examples of this intrusion. Now, long before we become conscious, let us say of hunger, our unconscious mind has been aware that the stomach is empty and the stock of energy is running low; it is only when the necessity for food is getting urgent that it transfers this knowledge to the conscious, in order that the latter may take the necessary steps to secure food. The more delicately poised central nervous system, which is intended for higher things, is not troubled with mere animal needs until the devil begins to drive. And what is true of hunger



is equally true of the other primal viscera, bladder, bowel and reproductive organs. They are always in function, but it is only now and again that we become conscious of them, and our consciousness is affected in order that it may take the necessary steps to ensure the desired relief or satisfaction. The desire for relief or satisfaction is brought about by a rise of pressure within the organ. It is only when the pressure is reduced that our conscious is set free to revert to those higher things, about which, in psychological societies and spiritualistic seances, we hear so much.

I have asked you to follow me thus far in order to show that the term unconscious mind is not a mere abstraction, that the thing has not only a name, but a local habitation, and that the said local habitation is in the innermost recesses of our most intimate being. In order to dot the i's and cross the t's of this wholly heterodox proposition, let me give one more instance. When a microbic army gains a footing in the tissues the defensive phagocytes are immediately mobilised, and proceed to make an orderly advance against the invader. Simultaneously the temperature of the whole body is raised—we call it a fever—with a view of paralysing the invaders and facilitating the work of defensive destruction. No one surely can deny that this complicated and effective plan of campaign could be the result of anything but hard thinking, and it is quite obvious that the thinking is done, not by the brain, which is blissfully and disdainfully ignorant of such material happenings, but by the vegetative nervous system acting in conjunction with the unconscious mind. Let us now look a little more closely into the matter and enquire what are the motors of this unconscious mind. We know that it resides in the ganglion cells, in the viscera and the ductless glands, but what part respectively do these separate portions play. Well, the answer is that while the time is not yet ripe for dogmatic statement, there is a large mass of evidence which goes to show that the ductless glands, the endocrines, with their essences, their hormones as they are called, constitute the mainspring of this surprising mechanism. Nor does the importance of the endocrines stop here, for, according to the exact proportion in which their essences are admixed in your blood, you are tall or short, dark or fair, phlegmatic or choleric, saint or sinner, sexual, homo-sexual or sexless, male or female. Now if they have these powers, and they have, it is not too great a flight of imagination to believe that they dominate the unconscious mind. Let us look at them more closely.

It has long been recognised by physiologists that there is a very intimate association between the supra-renal capsules and the ganglia of the sympathetic nervous system. The two were indeed originally, that

is, primordially united, and they develop simultaneously in the evolutionary tree until we arrive as high as the amphibians. In them, groups of adrenal cells are released from the sympathetic ganglia and wander along the aorta to come finally to rest in the neighbourhood of the kidneys<sup>1</sup>. In man they have become rather complicated organs consisting of an outer portion (cortex) or bark, and a central portion (medulla) or core, the respective functions of which are by no means identical. It has been said with considerable truth that the secretion from the medulla or core makes for flight, whilst that from the cortex makes for fight. Certain it is that animals with a large cortex are pugnacious and dangerous, whereas those with a narrow cortex and relatively large medulla are timorous and fugitive. With regard to the cortex, it has been shown that it is in some rather subtle way connected with the development of the brain. In the first half of the second month of uterine life the supra-renal glands are twice as large as the kidneys, and the disproportionate size is due almost entirely to an excess of cortex. This occurs in man alone, never in the lower animals. If this phenomenon does not occur, if, that is, the intra-uterine proportion between cortex and medulla remain as in the lower animals, then the brain fails to develop. It is therefore evident that the growth of the brain is dependent upon the adrenal cortex. The medulla secretes a substance called Adrenalin, which is discharged into the blood. In times of peace within the organism the amount of this discharge is not great. But there is a very large reserve of it stored within the medulla, which is promptly mobilised and advanced into the system on the outbreak of any disturbance. When pain is inflicted, or emotions are excited, especially fear and anger, these reserves are hurried to the blood stream and immediately produce most dramatic results. The peripheral blood vessels contract, the blood pressure is raised, blood is withdrawn from the viscera to be transferred to the brain and muscles—for fight and flight—temperature rises, pulse-rate quickens, eyes bulge, hair stands on end, and skin becomes moist. This complex is the physical expression of fright, fight and flight, and it will thus obviously depend upon the size of the cortex whether the animal aroused into alertness will use his adrenalin to attack or to run away. Go into a primeval forest and frighten the animals. If you live to tell the tale, you will be able to point out with certainty those of them which have a large adrenal cortex and those in which the medulla predominates. But the civilised life of man is just as full of shock and stress as was that of his primeval ancestor. The shocks and stress are rather

<sup>1</sup> Biedl, 1st Ed., pp. 132-33.

different, it is true, but it is to the supra-renal glands that he unconsciously appeals when in need of reinforcement. The stock of reserve in the glands is to a certain extent limited, and if an individual is for ever making demands for reinforcement, the stock is liable to give out. Such is the real explanation of the condition known as neurasthenia. True neurasthenia is not primarily nerve exhaustion, it is exhaustion of the supra-renal glandular secretion, brought about by too frequent or too vigorous calls upon its resources. The adrenals are the oldest of the endocrine glands, and thus preside not only over the more primitive emotions, but also over the characteristics which originally made for the survival of the fittest, and the physical equipment which accompanied them. Thus the person who has well-developed supra-renals is virile and aggressive, alert and energetic, of short or medium stature, with a considerable growth of hair on the trunk.

Now, these adrenal glands are members of a hierarchy, of which besides the adrenals there are several other members, at least three among whom are of equal importance with the adrenals. These three are the thyroid, the pituitary and the gonads, or sex glands. There are in addition other members, such as the pancreas, the pineal and the thymus, and the important fact to remember concerning the whole hierarchy is that its members are interdependent. If one of them overacts, a response is immediately forthcoming from at least one, often from more than one, of the others. The endocrines may thus be compared to the oarsmen in a delicately balanced outriggered boat. They are all pulling in one direction, at the same time as some are pulling against others; excess or insufficiency on the part of one will immediately be felt by all the others, who respond to redress the balance. And, as in an outriggered boat, there is a predominating or guiding oar who sets the pace, the stroke oar, so in the endocrine boat there is always one prepotent gland which sets the pace and strikes the prevailing note. In the case of the adrenal cortex we have already seen the effect of its predominance in the case of a man, but we have to recognise that the same note may prevail in the case of a woman. In such circumstances the female becomes virile and aggressive; she produces hair on the chest and other unwelcome places, even when still quite young. There are a good number of such women in this country, but very few of them have husbands. When they have, the husbands are very sorry. The riddle of their existence is solved by a consideration of their endocrine balance. The very womanly woman has a very active thyroid and a relatively inactive adrenal cortex. In the virile militant woman the proportions

between these two glands are reversed, her adrenal cortex overtops her thyroid, and in so doing produces a type of character and conduct which, though it may have its place in the scheme of things, is not generally regarded as a domestic treasure. From this we may deduce another fact of importance, namely that the thyroid and supra-renal antagonise one another. This, though true in a general way, is not always the case. That it should be true is not surprising when we realise that the thyroid was originally a female sex organ. That it should not invariably be the case is due to the influence of some of the other closely connected and ever watchful endocrines, notably the pituitary and gonads.

The function of the thyroid in the human economy is, briefly expressed, to make the fires burn more quickly; to raise the creature from the level of a cold-blooded to that of a warm-blooded animal. It was the thyroid gland which was the cause of the evolution of the sea animal into a land animal, as Julian Huxley has shown by his ingenious experiments at Oxford, and the gland continues to exercise this warming and stimulating effect in its present situation. To realise its potency in this direction one has only to look at a cretin—that is, a thyroidless human child. There you have a young animal almost cold-blooded, with coarse features and coarse animal hair, a dry skin, a protruding tongue, with wads of dumpy tissue, so distributed as to represent not obesity, but a caricature of obesity. If there is speech, there is no language; if there is instinct, there is no intelligence. It is not a child; it is a living, breathing mass of fleshly and repulsive inertia. If now to this agglomeration of cells you add another ingredient, thyroid extract, you perform a miracle. In an amount of time which is almost incredible, all is changed. The caliban-like creature becomes entirely human, and is shortly able and anxious to take his place amongst his fellows. It must not be supposed that all the effects of thyroid extract, given therapeutically, are as dramatic as this, for the part played by this gland seems to be that of stimulator and supporter of the other glands—the bellows to the fire, the coachman to the team. Without it we can indeed exist, but it is merely existence; it is not life. With a full measure of it we become temperamental, we touch life at a variety of points and places, we enjoy wine, woman and song; we become in the jargon of the psycho-analysts *extro-verts*. I have sometimes been led to doubt whether the thyroid had any specific functions of its own. That it has the general function of stimulator there can be no doubt, and I have often known it to ferret out and awaken into activity dormant functions of drive and check which had hitherto been hidden away in remote corners of form and character. What may



be called the thyroid apparatus includes not only the thyroid gland itself, but the glandlets which in human beings are generally embedded in its substance, called the parathyroids. As we have seen in the case of the supra-renals, and shall see again in the case of the pituitary, these two parts of the thyroid apparatus have different functions. Indeed, in this case, the functions are diametrically opposed, for, whereas the thyroid itself acts as a general accelerator to the machine, the action of the parathyroids is that of a brake or drag. This action is due to their power over calcium metabolism. The story of this mechanism is still rather involved, and as the explanation is not necessary to my present purpose, I will merely emphasise the undoubted fact of the antagonism of the two parts of the thyroid apparatus, and pass on to the consideration of the pituitary.

The Pituitary is a small organ—about the size of an ordinary pea—which is situated inside the skull, a short distance behind the root of the nose. As if to emphasise its extreme importance, it is embedded in a little skull of its own—the sella turcica. This, while ensuring it from external injury, is by no means without drawbacks, as, for instance, when for any reason the gland wants to swell. The pituitary, or hypophysis cerebri, as it is also called, consists of two parts, an anterior and a posterior, the functions of which differ very widely. The anterior part is concerned with the development of the bony skeleton. When, during the growing period, it is overactive, it produces very tall people, and in extreme cases, giants. If the overaction of the gland does not occur until after growth is complete, the result is a very characteristic creature known as an acromegalic. Most of him remains normal in the matter of size, but other parts become disproportionately big. His head enlarges, especially the lower jaw; his ears, nose and lips become coarser; so does his mentality. The overaction of the gland generally means that the gland itself enlarges, but as it is encased in a bony envelope, any real enlargement is difficult, and every attempt in that direction will produce severe headache. When the anterior portion of the gland is lazy or underactive we have the conditions known as Froelich's Syndrome, first described by Jonathan Hutchinson under the name of Lipomatosis Universalis Asexualis, that is, a generalised distribution of fat combined with sexual impotence. The subjects of this condition are obese and somnolent, often vicious, but by no means unintelligent. It is probable that Dickens drew the picture of the fat boy in *Pickwick* from one who was definitely deficient in Anterior Pituitary. Though not yet certain, it is more than likely that it is to the anterior portion of the pituitary

that we owe the blessing of sleep, and there seems little doubt that the phenomenon of hibernating animals is regulated by the same agency. The posterior portion of the hypophysis cerebri is originally derived from nerve structures; that it has nevertheless acquired the power of secreting an essence which profoundly influences a large number of organs is now beyond question. This essence raises the blood pressure, causes contraction of the involuntary muscles all over the body, including the intestines, the uterus and even the heart itself. The gland as a whole then, anterior part and posterior, is a most important organ. Its complete extirpation brings death in a few days.

There remain for brief consideration the gonads, the sex organs, which of course play very different parts according as they are typically male or typically female. But in truth typical instances are rare. Every man has some streaks of the woman in him, and every woman some streaks of the man. The whole subject is fascinating in the extreme, even its history. It takes us back to that inconsequent, and consequently unheeded, genius Brown-Sequard, and lands us in the lap of the *Daily Mail* and the monkey gland. I am, however, warned that no mere physician need flatter himself that he can teach any member of a psychological society anything about any question relating to sex. I shall therefore content myself by reminding you that there are such things as interstitial glands, both in testis and ovary, and that their influence in the two sexes is, in the former, to produce maleness; and in the latter femaleness. I need not insist upon what these terms imply either in outward and visible signs or in inward and spiritual graces. I need indeed go no further than to quote the saying of Virchow that whereas woman is a pair of ovaries with a human being attached, man is a human being furnished with a pair of testes. I feel that I may, however, without fear of being altogether banal even to psychologists, refer to one aspect of the question which offers a key to a problem of our present civilisation which is very generally discussed. Why are there so many unhappy marriages? The answer is that in the vast majority of cases, that is, when one of the contracting parties is a virgin, there are not, and in the nature of things there cannot be, any reliable data upon which the other contracting party, the man, can form any considered opinion as to the suitability or otherwise of the lady to whom he is attracted. At a certain age, the ordinary marriageable age, the man is usually a complete physiological entity, whereas the girl is not. A woman cannot be said to be hormonically complete until she has had a child, still less can she be so considered until she has been through the ordeal of sexual congress, for

the hormone of the male prostate is essential to the physiological perfecting of the female. It is said that marriage is a lottery. It is, in the case of both parties; but it is far more of a lottery in the case of the man than it is in the case of the woman. A man marries a cocoon, and there is nothing, except perhaps a contemplation of his future mother-in-law, to enable him to gauge what will emerge from that cocoon; whether it will be the beautiful and dutiful butterfly of his daydreams, or a scarifying scorpion, accompanied, as in the zodiac, by twins. It is said that widows are dangerous: it would seem from these considerations that in the matrimonial market they are far less dangerous than maidens.

I have now endeavoured to sketch the evolution of the vegetative mind from the original ganglion cells through the sympathetic system to the supra-renal capsules, and hence to the whole endocrine system. I have sought to bring before you only so much of this system as seems to have a bearing upon the general make-up of the individual, mental as well as physical. It is, as you know, impossible to dissociate the two. Even the least experienced of us can claim to some extent to judge a person's character by his outward seeming, his voice, his gesture, his shape and colour, and his eyes. If therefore you grant to the endocrines the responsibility for the one, the other follows as a matter of course. If a man's conduct is determined by his endocrines, so also is his character, for character is only conduct so often repeated as to become habitual.

It comes then to this: the vegetative mind, the subconscious, is an entity in the creation of which the endocrines play a preponderant part, and they continue to dominate it during the whole life of the individual. If the endocrine balance becomes altered by environment, accident or disease, then the individual becomes changed bodily as well as mentally. I need only instance the effects of surgical castration in either sex, or the physiological castration of the menopause, to remind you of the really astounding mental and physical changes which the withdrawal of a single hormone may produce.

The position then would seem to be this. We are born with a certain endocrine pattern which we obtain from our parents by way of their gonads. This pattern is capable of an almost infinite variety within the four corners of what may legitimately be called the normal. That is, the proportions in which the various hormones are admixed at birth may vary considerably in the case of, say, four brothers all of whom may be perfectly normal. The one may be a man of action, the other a scientist, the third an ecclesiastic, the fourth an artist, and each may deservedly rise to high distinction in his calling. The trend in each case

is initiated by the exact proportions in which their hormones are mixed, and this in its turn seems to be determined by some considerations which stand in need of closer investigation, and others which are obvious. Among the former are the states of mind and body of both parents at the time of conception. It is easy to believe that child begotten in drunkenness would be unsatisfactory, because of the poisoned hormones. It is a very common observation that a love-child is nearly always strong mentally and physically, a fact which tells of busy endocrines and stimulated senses. The state of health and of mind of both parties must obviously make a great difference in the offspring; whether for example the female is merely passive or active, either in sympathy or antipathy. If the endocrine balance is not determined by these and similar subtleties, how comes it that all the children of the same parents do not resemble each other as closely as most twins do?

Of the obvious influences which determine the endocrine pattern, and hence the type of the unconscious mind, perhaps the most obvious are those which are summed up in the term environment. Climate, which is only another way of saying race; for climate determines racial characteristics: education, both home and institutional, which is only another way of saying suggestion; for all training is fundamentally suggestive: and finally, food, the type of material from which the tissue-waste is replenished—these are the factors in environment which concern us here. In the matter of climate we have only to look at the question of colour. The dark races have not developed their pigment out of mere superfluity of naughtiness. They have developed it by the aid of their pituitaries and their adrenals to protect themselves against certain deleterious rays of the solar spectrum. When the question of colonising with white races continents whose aborigines were coloured, comes to be studied scientifically, it will be found that it is only the white woman who is capable of producing enough pigment to protect her thyroid and her ovaries, who will escape sterility; and that the white man similarly endowed with vigorous pigment-forming glands is the only one who can successfully resist the onslaught of tropical conditions and disease. The Spaniard in America—yes. The Scandinavian—no. The Jew—anywhere; because he can change his pigment as easily as he changes his coat or his nationality.

That education is merely a process partly of organised and purposeful suggestion, and largely of suggestion which is purely fortuitous and haphazard, must be obvious to anyone who will give the matter a moment's serious consideration. The very language you speak, and the way in



which you speak it, the manner of your address and the tone of your bearing, are the outcome of suggestion acting on the imitative faculty. That you should behave like a lady or a gentleman, instead of like a fishwife or a costermonger, depends solely on the suggestions which you received when young. That you should be an Anglican or a Roman Catholic, a Buddhist or a Presbyterian, is purely a matter of suggestion, for you certainly did not at the age of six or seven, when your nebulous superstitions were beginning to assume a definite religious form, examine into the foundations of the various creeds and make a deliberate choice. This factor of suggestion is one of enormous importance in the eventual determination of the endocrine pattern, for the various glands of the system will have to adapt themselves to the surrounding suggestional atmosphere, and when they fail to do so, trouble arises. If, for instance, a boy finds that he is expected by his widowed mother and her entourage to be active and aggressive, to behave in fact as though he had a vigorous adrenal cortex, whereas in reality his equipment in that direction is originally meagre, he will, if he can, develop the necessary amount of cortex and gradually present the characteristics demanded of him. If he fails, he finds himself increasingly out of harmony with his surroundings, and there ensues a failure of adaptation, always painful, often pathetic. Psychologists talk a good deal about such failures, but not very many of them realise that these difficulties are primarily and fundamentally of endocrine origin. When the glandular cause of such conflicts comes to be generally recognised, their treatment by psychical methods will be rendered very much more simple and satisfactory by reinforcing it with remedial measures applied to the glands themselves.

And so we come to the third and last element in environment, namely food; the substance, that is, which we ingest in order to repair the waste which is inevitable in the working of these busy and bountiful glands. And in this connexion let me remind you yet again, that the endocrines are amongst the oldest organs which we possess. Active in the most primitive of living things, they gradually developed themselves until they arrived at the stage in which, as a complicated system, we find them in primeval man. During the whole of this period there has been progress in development—evolution towards higher and more efficient types; which means that during this period the endocrines have been adequately supplied from outside sources with material which was perfectly adapted not only to health, but to progress; that the income was not only sufficient for every-day needs, but was such as to allow of a balance which would permit of fresh enterprise and undertaking. Now

what was this material? Originally of course it derived from the sea; the amphibian found it both on land and in the sea, and the complete land animal found a sufficiency of it on the earth. The characteristic of the food in all the stages of evolution upon which I wish to insist is that it was alive. When it was eaten it was either actually living or so recently dead as to be chemically alive, that is, before any cadaveric changes had taken place. And this characteristic continued to pervade the food of the animal kingdom until long after man emerged. There must obviously have been a stage in human development, a precoetural stage, as it has been called, in which man knew nothing about the cooking-stove, and it was as obviously at that stage that he succeeded in raising himself above the level of the brute creation to become what he now is. Whether his initiation into the aesthetic advantages of cooking are accurately represented by Charles Lamb's *jeu d'esprit* I will not stop to enquire; it is at any rate quite certain that the cooking of food was, and is, as great a departure from normal evolutionary conditions as the distillation of alcoholic drinks. We have come to regard cooked food as natural and normal, whereas it is in reality grossly abnormal and unnatural. And the reason for this has been supplied within the last few years by the discovery of the vitamines. Vitamines are substances which are essential to our growth and development when young, and necessary to the maintenance of health and efficiency in adult and advancing years. Now, broadly speaking, it is true to say that vitamines are present in uncooked foods and absent from foods which have been cooked. They are very delicate and labile substances which are destroyed or driven off by any culinary process. So that although we may legitimately enjoy cooked foods, even as we enjoy tobacco and alcoholic drinks, honesty compels us to place the three in the same category; that is, of things which, though nice, are physiologically naughty. The naughtiness of cooked foods resides in the fact that they contain no vitamines, and without vitamines you cannot have well-developed and harmoniously working endocrine glands. If you will carry your minds back, you cannot fail to realise that it is only since we began boiling our children's milk against the bacillus of tubercle that the said children have developed the comparatively new diseases of rickets, adenoids and appendicitis, all of which are endocrine diseases, and that the said boiling so far from decreasing the incidence of tuberculosis, has actually contributed largely to its increase. The only method of combating tuberculosis, or any other disease for that matter, is to strengthen the individual against attack by looking to his physiological defences. To try and kill the bacilli with

a casserole is to revert to the methods of the celebrated Mrs Parkinson, who sought to keep out the Atlantic with a mop.

Vitamines have been very aptly described as exogenous hormones. They are as necessary to the endocrine glands as the hormones of the glands are necessary to the organism. Without vitamins there can be no healthy endocrines; without endocrines there can be no healthy vegetative system; and without a healthy vegetative system there can be no healthy mind. Thus the old saying of "mens sana in corpore sano," always generally, if rather academically, admitted, receives additional and intimate support from an examination of the most recently unveiled wheels of our fearful and wonderful being.

In venturing to submit the foregoing considerations it has been my purpose to bring you to a realisation of the fact that the unconscious or subconscious does not reside in Parnassus or Olympus, but that it has an earthly and perhaps a very earthy dwelling here below. That dwelling is not indeed, like the brain, the organ of the conscious, a castled tower flanked by sweeping walls with loophole grates where captives weep—a self-contained manorial abode—but is constituted by many huts, most of them of primitive design and of lowly construction peopled by a primal community whose members pour all their powers into tasks whereof the memory of man runneth not to the contrary. You do well to probe the unconscious, to test and interrogate it, but you will never do these things to any real purpose until you consent to come down from Olympus and forsake your present affection for somnambulism in order to study physiological realities. You will arrive at much better results and more helpful if you will turn from the rather fanciful analysis of unsubstantial dreams in order seriously to study the evidences of the endocrine pattern. They, and they alone, can read you riddles and show you miracles.

## THE SEARCH FOR A KINGDOM.

BY ALFRED CARVER.

IN his most fascinating analysis of Jensen's *Gradiva*, Professor Freud remarks that "our author has omitted to give the motive whence originates the repression of the erotic life of his hero<sup>1</sup>." Some two years ago it fell to my lot to analyse the life-history of a young man, which reminded me so forcibly of the story of *Gradiva* that I deem it worthy of record as throwing light upon the motivation of such a repression.

The young man in question, whom I will call B., was a curate of the Anglican Church aged thirty-two. He was sent to me by a colleague because on two occasions within the previous six months he had wandered off on foot on long fugues with no subsequent knowledge of the events which had occurred during them or of the motives which had prompted them. B.'s mother, whom I saw just prior to my first interview with him, volunteered the information that he was the second of two children and had always been very attached to his home, but though considerate for all he showed particularly a respect and 'reverence' for his father. He was of a fanciful disposition and as a child had manifested a lively curiosity, 'wanting to know and do everything.' He had been in many ways precocious, but his career had frequently been interrupted by ill-health. B. supplemented the above by stating that he suffered from headache, insomnia and anxiety dreams; adding that two dreams recurred frequently with only slight variations. He was afraid of being alone and afraid of waking in the dark, and on this account had recently been sleeping with his father. When asked why he was wearing spectacles he stated that his eyes had been weak, sometimes almost blind, since his early school days, but as this had been attributed to overwork, he laid no stress upon it, especially since several oculists had assured him that no serious organic defect existed.

At the time of his first fugue B. was working as a curate in a parish near Birmingham. He had not been well for some time before this and his sleep had been disturbed, not only by dreams, but by a feeling that all night his mind was at work trying to solve conundrums, chess

<sup>1</sup> S. Freud, *Delusion and Dream*. English trans. by H. M. Downey, p. 160.



problems, etc. His eyes also had been a source of trouble to him, and altogether he had felt that something which he did not understand was taking place. He sought to blame his surroundings for this and decided it would be better if he could get away from them. Yet he strove all the harder to concentrate upon his work. Feeling, however, that there was something he needed to think out he began to go for little walks between his duties. One afternoon after calling upon a lady, to arrange with her some detail that her husband was to perform at a service, which B. proposed to conduct that evening he went for a walk, which developed into his first fugue from Birmingham to Blackpool: a distance of some 120 miles.

At first B. had no recollection of his fugue, but during analysis the steps were retraced and many of them verified by circumstantial evidence. He first changed his clerical collar and put on an old overcoat, then set out northwards avoiding as far as possible the main roads and following by night a star, whose glimmer exercised a peculiar fascination over him. During the earlier stage of his journey he fancied that C., an old school friend, was accompanying him, but later thinking that C. must have got left behind, he sent him several post-cards informing him of his progress and mentioning points of interest on the route.

After four days he arrived in an exhausted condition at Blackpool; a place he had known well as a child and where lived his mother's sister and a recently married male cousin of his own age. Although B. was not conscious of any desire for marriage the marriage of his cousin had presented itself to him as a puzzle. It jarred upon him considerably. He felt as though this cousin somehow had stolen a march upon him. 'He thought that as he and his cousin were of the same age they ought to feel alike,' but that in some inexplicable way the cousin's marriage made him a settled man and raised him above B. It was to the home of this cousin that B. directed his steps in the fugue after setting out from his parish with the vaguely conscious idea that he had some problem to solve and that this problem was connected causally with his symptoms. Unfortunately when he 'came to himself' at Blackpool the solution of the problem was no nearer; his fugue was attributed to overwork and a long holiday was prescribed.

After about six months' rest B. determined to resume work, and made arrangements to go as curate to a quiet parish in Hereford. While choosing his lodgings at this place he experienced an overwhelming feeling that he would be lonely and unable to settle down there. He attributed this feeling to the fact that he would again be separated from home, and tried

to console himself with the promise that his people would come and stay with him at Christmas.

Before the time arrived for him to take up his new duties, B. again went off in another fugue. This time starting from home he set out in the direction of London, but was recognised and brought back when he had only got as far as Banbury, about 60 miles. It was shortly after this that B. was referred to me for analysis. I will now put together briefly, but in orderly sequence, the history which came to light piecemeal during analysis.

B.'s recollections stretched back to early days when he had been the intimate companion of his sister, who was one year his senior. He recalled that they slept in the same room and there used to play together. One game in particular came prominently before him. This was a game of birds in a nest feeding their young. His sister used to curl up in bed forming a sort of nest into which he then snuggled and made believe to feed her after the manner in which singing birds feed their young. The sister played the combined rôle of mother-bird, nest and offspring. This game was accompanied by a good deal of excitement and cuddling.

A little later (about age four) B. became disturbed about the sexual difference which he noticed between himself and his sister. It seemed to him either that there was something wrong with him or that his sister lacked something. He could not decide which of these alternatives was correct, but rather preferred the former. This problem exercised his mind a great deal and he sought every possible occasion to solve it, but without success.

At the age of five he went to school and started to learn the alphabet. He then experienced great difficulty with the letters U and V; did not seem able to write them and repeatedly asked the teacher to explain the difference between them. The teacher, however, was impatient and rebuked him as though he were asking something wrong. During these lessons B. was troubled by a great desire to micturate, but dare not ask to go out lest this also should prove in some way wrong. Indeed, as he grew older, he felt increasingly that there was something wrong with him. He feared also that his parents would put a stop to his games with his sister now that the difference between them was realised.

One day when the parents were out a young nursemaid, with impressive secrecy, said that she would tell B. and his sister how babies came, but they must never tell or even speak about it. She then gave them some garbled version which B. does not seem to have understood and the only part of which he recalled was that if a man climbed

up on a woman and if he put an apron round her she would have a baby. B. did not feel interested at the time, but was impressed by the secrecy which the maid enjoined and felt that she did wrong to tell. Apparently the maid was prompted to say whatever she may have said because the children were playing dolls and B. was taking the part of father and doctor combined;—bringing babies in a bag. About this time an older girl at school confided to B. that she had to go home early because her mother had a baby. B. again felt that the girl ought not to tell about such things and ran away immediately to satisfy a sudden strong desire to urinate. The only obvious effect of the maid's tale was that B. became shy before his sister and afraid to help her in dressing—putting things round her.

B. recalled that at this time of his life he used frequently to conjure up phantasies of an ideal home, in which he pictured everything exactly as it was in his home with the one difference that his parents were absent and that he himself was master of the home; there was no mother, but he and his sister were the two children. He thus pictured himself in the dual rôle of father and child but eliminated the rôle of mother and wife from his day-dream.

The atmosphere of B.'s home was distinctly religious and he early showed a tendency to sublimation in this direction. Thus, on Sunday evenings he used to preach to his sister from a chair as pulpit. One of a series of sermons on the Lord's Prayer, written about age eight, is now in my possession and was subjected to analysis. The theme of this sermon is 'The Father': the goodness of the father in giving us a home and love; the obligation which rests on us to be faithful and obey him in return. In childish words he exhorts his hearers not to be amongst those that are cast aside, but rather to earn through love and obedience the harp, the golden crown, and the place prepared for them.

It now happened that a 'big man,' who was in command of the Boy's Brigade attempted one evening after a party at his house sexually to play with B. This alarmed him very much. He seems especially to have noted and been frightened by the 'towering size' of the man. Nothing came of the incident except that B. refused to join the Boy's Brigade.

One morning shortly after this B. on going to the bath-room found that his father had not finished, but was still drying himself. It came to B. as a sudden inspiration that if he looked through the key-hole he would solve the old problem regarding the difference between himself and his sister. Actually all that the ray of light through the key-hole revealed to his searching eye was a white towel in movement. Yet B.

was suddenly seized with panic and rushed back to his room oppressed by an overpowering sense of guilt. Mixed with the feeling of fear and guilt there was also a tinge of resentment, as though his father had thwarted him. A few days later he experienced 'a feeling of being out of place as though he had no right there and would be cast out.' He began to fancy that no one loved him, and had repeatedly to be reassured and petted by his mother, who detected him crying. One Sunday evening while, according to custom, preaching to his sister, he 'fainted.' 'The room seemed to get dark and the darkness seemed to take shape like a big threatening cloud.'

The words he had spoken just prior to fainting were, "if your eyes have been used to look at sin they will never be able to see God."

B.'s health now became bad and he had difficulty in seeing what was written on the black-board at school. For a time he managed to hide this, but eventually the master detected it and said to him, "there is something wrong with you." These words greatly frightened B. for they seemed to confirm the thought he had had regarding the difference between himself and his sister. That there was something wrong with him was exactly what he secretly fancied. It now seemed to him that he was exposed before others and he felt guilty and ashamed as well as afraid. He was now withdrawn from school for a time and though examination of his eyes showed no appreciable defect spectacles were provided. B. felt very much ashamed of himself and considered that the wearing of spectacles branded him. The time of this occurrence can be accurately determined as just before his ninth birthday. At this time also the separation of B. from his sister was effected.

When he returned to school B. set himself seriously to work. Previously, though intelligent and even somewhat precocious, he had not made any effort to get on. Now, however, he showed himself ambitious in all directions, but manifested especially a liking for chemistry. He experienced great satisfaction when upon adding one chemical to another the desired result came about. 'He felt that he had created something.' In the same way with photography, which he now took up, 'it gave him intense joy to see something come for which he was responsible.' The chemistry master seems to have been rather clumsy and generally to have failed in his demonstration experiments. B. came to expect this failure and to gloat over it secretly. Furthermore the boys, by way of practical joke, used to cut off pieces from the master's gown, and at this again B. rejoiced though, at the same time, feeling guilty and uneasy about the act. On his return to school B. had become friendly with a boy, who



taught him, amongst other things, the game of seeing who could eject his stream of water highest in the air. This boy also told B. that it was the urine which made babies grow, adding impressively that the thing had to be done in the dark. One day this boy said to B., "I am educating my sister in these matters." B. immediately experienced 'a great revulsion of feeling' and was almost sick. He 'forgot' the incident, but from that day forth he avoided the boy. He then formed another friendship. The new comrade, C., remained associated closely with him all through his teens and is to this day his greatest friend. It was he whom B. imagined to be accompanying him during the early stages of his first fugue. The two boys invented many original games of a highly imaginative character, their chief delight being the construction and working out of detective problems and the making of secret codes. The keynote of all their games may be summed up as secrecy and the investigation of secret things. B. further, 'had a longing to go out into the world and see things.' This led (at age 13) to the starting of an imaginary kingdom founded upon *The Prisoner of Zenda*<sup>1</sup>. To enter into the details connected with the running of this kingdom of their fancy, interesting though they are, would be too great a digression. Suffice it to say that the kingdom ever extended, for one of the essential rules of the game was that all land investigated upon a holiday or encompassed by a cycling or walking tour became annexed to the kingdom, which in this way had come to include a tract of country bounded by Dartmoor on the South and Blackpool on the North. This make-belief continued into their twenties and was closely guarded as a secret between them. Nearly all their friends and relations were allotted places in the kingdom, but without their knowledge, which often gave occasion for sly fun and merriment between the two friends.

At the age of fourteen and a half B. was confirmed. Both the preparation classes and the ceremony were serious matters to him. The instructor laid great stress upon confession and the forgiveness of God, and B. felt a craving for forgiveness. During the preparation he conceived the idea that he was called to be a missionary and chose China as the place where he would 'extend the kingdom of God his Heavenly Father.' This resolve, however, he kept quite secret. He felt that his people ought to know, but somehow he was afraid to tell them. The evening before confirmation he had a talk with his mother and emphasised the phrase 'I am ready.'

'By this he meant ready for the great dedication of his life; ready

<sup>1</sup> Anthony Hope, *The Prisoner of Zenda*.

for the sacrifice; ready to go away to China, which represented the uttermost parts of the earth.' Naturally his mother only understood words as referring to the ceremony of the morrow, but to him they had a second and deeper meaning. From this time onwards B. frequently experienced the 'I am ready' feeling when called upon to come to any important decision in his life. 'At confirmation he was taught the use of confession but he put off active confession although he felt he ought to practise it. Confession was so hard and he screened himself behind the thought that his father would not like it.' Later, at age eighteen, he forced himself to active confession, but even then he never felt happy and free after it as he wished and expected to do. Always there clung to him a vague sense of unworthiness and a feeling that he had not really confessed all. His father-confessor upon learning this told him that he must not blame himself unduly. This well-meant advice only irritated B. and 'made confession lose some of its value, since he felt that he was not properly understood.'

B. now gained an exhibition at X. College, Oxford; went into residence and for the first time definitely declared his intention to take Holy Orders. At first all went well, but in his second year, during the normal course of his studies, doubts as to the authenticity of the Pentateuch and the genuineness of St John's Gospel began to assail him. 'It came acutely before him, where would he stand if the gospels proved to be inventions?'

A violent conflict now arose between his critical faculties and his desire to accept authority. He tried to put the thoughts away from him, but by the end of the term found a difficulty in applying himself to his work. He felt a great darkness, which reminded him of the earlier experience when preaching to his sister. He further had a feeling that he dreaded the coming of light for fear of what he would then see. In this state of mind B. sought to force matters by offering himself immediately to the S.P.G. as a candidate for missionary work in China. He had, however, an inward premonition or conviction that he would be refused on account of his eyes, which at times failed him completely. This proved to be correct for the doctor rejected him; reporting that he had a nervous affection of the eyes. So severe was the struggle that B. completely broke down and had to degrade one year.

He reconciled himself, however, to abandoning his long cherished call to the mission field and persuaded himself that he could advance the kingdom of God just as well at home.

On returning to Oxford he took his degree and proceeded to a theological college. Here there was nothing outwardly remarkable in his

progress, though in a modified form the struggle between his wish to bow to authority and his wish to be free continued as an undercurrent. As a reaction against authority he developed an aversion to time-tables, and did not like travelling in any vehicle unless he had the control of it. Also, although at this time he had completely 'forgotten' the Peeping-Tom incident, he never could go to the college bath-rooms if any one else were there; and he experienced a great repugnance at the mention of sexual matters in any form or connection.

In 19— B. was ordained and took up his first junior curacy. During this time he lived at home. His sister, now a school teacher, also lived at home; so the family circle remained unbroken. His vicar was very friendly and took B. entirely into his confidence regarding the working of the parish. The idea, with which B. thoroughly sympathised, was to fit in a new 'higher-church' practice without disturbing the old regime. Altogether then circumstances might have seemed to most people entirely favourable. Yet that autumn B. broke down again. Once when reading the lessons his eyes suddenly failed him and he experienced a feeling as though he had in some way committed a crime. If anything went wrong he had an overpowering sense of guilt as though he were the culprit even when it was quite obvious to himself as well as to others that he was in no way responsible. B. tried to hide his difficulties from his people and especially from his sister, but eventually had to give in.

Shortly after his return from holiday the war necessitated a reduction in the clerical staff of the parish, and B. being the junior had to seek another curacy. This he easily obtained about five miles away, but the distance though small involved a breaking up of the home, which B. felt acutely. Once again he was fortunate in his vicar, yet he fancied that he would be despised for his weakness and that he would not be able to settle down in the new parish. He felt also an unreasoning bitter resentment against the senior curate of his old parish for not offering to leave instead of him. The feeling grew more intense when, shortly after his remove, B. learned that this man was about to marry and was therefore seeking preferment. B. recognised the unjustness of his resentment. He thought a good deal over it, but was unable to explain satisfactorily to himself why 'the wrong feeling' should be so intense.

In his new parish B. tried to keep control of himself by excessive devotion to work and threw himself feverishly into the Boy Scout movement. Yet the feelings of secret guilt and unworthiness increased and he had difficulty in taking confirmation classes partly because these involved talks upon purity, partly because they brought to his mind the

recollection of his own preparation and the desire for sacrifice and dedication which had first definitely asserted itself at that time. His sleep now was frequently disturbed by a dream that he was trying to climb up the church steeple, but kept on slipping back and could not reach the top. After this dream he always awoke feeling utterly exhausted and with a sense of disgust at himself. He was afraid of the dark and the bed clothes seemed to crush him like a big overpowering mass.

It now happened that a certain priest (not in the immediate vicinity) was accused of paederastia. This made a profound impression on B.: 'It caused him a shock which he did not seem able to throw off.' That Christmas he deliberately refrained from his custom of making presents to two boys, sons of an old friend, lest a similar accusation might be brought against him. When as usual he received a present from the boys he felt terribly mean and 'had a feeling that things which he did not understand were always happening.' The whole of this year he was ill, on and off, and frequently had to abandon engagements owing to headache. He made strenuous efforts to cast out the devil by rigorous devotion to work, and took charge of a ten weeks' continuous intercession service; himself doing many periods of twenty minutes each day. Eventually he had to give up and again consulted an oculist, who reported that the weakness of his eyes was due to 'nerves' and ordered a long rest. When the oculist put drops in his eyes B. was overcome by a feeling of shame as if something wrong would be brought to light.

A part of the prescribed holiday was spent near London with some old family friends—a father, mother and one daughter. The latter, a school teacher, very kindly did her best to show B. round London. On leaving them he went for the last few weeks of his holiday on a cycling tour to Church Stretton. 'Here he experienced a curious sense of elation as though all he saw belonged to him and as though there was always something fresh to see. Here on top of the hills he felt as if he had a right to all he saw.'

On his return home B. astonished his people by saying that he should like to spend his honeymoon at Church Stretton. He also wrote to C. in a similar strain, saying that the place formed an important part of their kingdom. He was now feverishly anxious to return to work, but being obviously in a restless unstable condition a compromise was arrived at, by which he was to do all sorts of relief work in the parish without being called upon to perform regular routine duties. During the next year, while thus engaged, B. was never really well. As was the case with Harold



he felt that 'he lacked something without being able to explain what<sup>1</sup>.' He suffered from insomnia and lay awake at night brooding over and blaming himself for every triviality of the day. 'Altogether he seemed to be living in a world in which things he did not understand were continually happening.' The old recurrent dream of attempting to climb the church steeple frequently recurred, and in addition to other dreams, a new recurrent one made its appearance. The latter was as follows: "I dream that I am walking along a narrow path with towering cliffs on one side and a river on the other. It is dark, and I am looking for some one—I do not know whom—who is just round the corner. Occasionally there is a glimmer of light in the darkness. This flashes right in my eyes and is very irritating. The water sometimes floods over the path and I fear there is no foundation under it and dare not go on. I awake very much afraid."

One more difficulty now occurred, namely, that there were in the parish a few people, one of them a deacon, discontented with the vicar, and B. felt that in loyalty he must without question always uphold his vicar. This revived the old struggle between his tendency to bow unquestioningly to authority and his inclination for freedom of expression. It did not escape his notice that he despised others who resigned their critical faculties, but this observation only added to his discomfort. B. spurred himself the more to trying tasks under disagreeable conditions as though he were in this way performing a penance. If his work was pleasant or the day fine he felt that he did not deserve it. Vaguely conscious of his own mental confusion he began to go for little tramps between his duties, 'feeling there was something he ought to think out, something left out.' 'The troubled state of mind, the bad headaches and the sense of guilt after confession seemed to him utterly out of place.' Yet he had no power to withstand their compulsive force, and in this confused state he abandoned his work and set out to Blackpool in the fugue previously described.

Before proceeding to the outcome of B.'s analysis it will be well to review some of the salient points in the history of this apparently pious young man, whose career, as we have seen, was from an early age interrupted by ill-health and weakness of the eyes vaguely attributed to overwork. One cannot refrain from remarking how little his parents, his early school-mistress or the master, who casually said, "there is something wrong with you," knew of his psychic life. Yet this is the rule rather than an exception.

<sup>1</sup> Cf. *Delusion and Dream*, p. 40.

Adults regard the infantile mind as a *tabula rasa* and, thanks to their own repressions, fail to observe the early play of instinctive forces. Thus, these forces instead of being guided into desirable channels are dammed back until they burst forth unrecognised in a variety of disguises and work mischievously. Among the most important of the instinctive forces which manifest themselves in rudimentary form at an early age is the sexual instinct, or perhaps one should rather say the components which subsequently become built up and organised into what is easily recognised later in life as the sexual instinct. It is to the genius of Professor Freud that we owe the elucidation of the enormous influence of 'infantile sexuality' in the development of the individual. Yet it is just over this most important point that the greatest opposition and the most bitter criticism has been levelled against psycho-analysis. Most people are willing to recognise any of the other instinctive impulses, which appear in rudimentary form as the games and play of children, yet on account of their own repressions they deny the early signs of the sex instinct and by their attitude to the subject produce the very evils which they seek to avoid.

If now we consider the earliest recollections of B., namely, the play between himself and his sister, it can hardly be gainsaid that these clearly betray their sexual character. Even if at first the reference to sex is indirect the disguise soon becomes too slight to deceive any but the wilfully blind. It may appear at first sight that B.'s sister is the primitive object of his affection, but on looking more closely into the history one discerns the figure of the mother in the background. Thus, in the little game of bird's nests, the sister is the mother-bird as well as the nest itself. Nor is the matter of nourishment left out though it is transposed; B. giving, not receiving, food in the form of French kisses. This transposition is not without significance, for in addition to disguisement it enables B. to assume the active masculine rôle and presents a compromise between masculine and feminine. The little incident of writing U and V is transparent enough; B. himself easily explained it during analysis as being the expression of his inward questioning regarding the sex difference between himself and his sister. U represents his sister, whilst V, which has a little piece added on, stands for himself; and what he wants to know is the meaning of this difference. His teacher's attitude, due to total lack of understanding, serves only to increase the repression which is in process of formation.

We may also note, because of its future bearing, the imperious desire to urinate, which occurs at this time.

Again, when considering B.'s early phantasies of a home of his own, modelled upon that of his parents, we notice that the mother is conspicuous by her absence. B. himself ostentatiously fills the rôle of master and father, thereby effectively eliminating his rival, but his imagination will not accept the domination over the mother, who is therefore quietly omitted from the picture. As though to compensate the father for his removal B. apotheosizes him and preaches to his sister of the greatness of "Our Father, which art in heaven." Yet this does not suffice altogether to remove the sense of guilt, and B. has a feeling that he himself deserves to be cast out. This feeling becomes intensified after his act of peeping through the key-hole at his father, which act during analysis he associated with the biblical narrative of Noah's sons. The offending organs—the eyes—must now be plucked out, functionally at any rate. Hence it comes about that he cannot see, and thus also justifies his fancy that there is something wrong with him. During analysis the blinding brought to his mind the story of Samson, and in his associations he confused the term cataract, which is one cause of blindness, with castrate, and then said he was not quite sure what the latter meant. The unconscious impulse still driving him, B. next devotes himself to chemistry. We may suspect that the direction of his ambition to this study is manifoldly determined. By means of chemistry not only can he investigate differences, he can actually create. Chemical fluids and urine are indeed developers of new things. Further he shows himself superior to his clumsy old master in creating, and by cutting off pieces from the latter's gown symbolically castrates him. It is obvious that the master has become a father-substitute and that at his chemistry lessons B. vicariously triumphs over his father. Yet his glee is held in check by feelings of shame and guilt. Directly towards his father B. exhibits, as an over-compensation, an exaggerated deference and respect amounting almost to reverence. We may note that his father had never treated him harshly and that B. never consciously entertained hostility or even ill-will toward the father.

The connexion between urethral erotism and ambition is indicated in B.'s devotion to chemistry as also in the competitive game which he played with his school-fellow; and we may here recall his early desire to urinate when his mind was acutely exercised over the sex problem. as it then presented itself to him.

With the coming of adolescence the desire for investigation and acquisition with secrecy takes a more romantic though practical form, and with his trusty friend, B. sets out to find and conquer a kingdom.

This he does by surrounding the country as the nursemaid once told him a woman had to be surrounded before she could become pregnant. The kingdom is founded upon Anthony Hope's novel, *The Prisoner of Zenda*, in which a travelling Englishman through a set of curious chances is crowned king of a foreign state and, more important still, wins the love of the princess who was destined for the lawful heir to the throne.

The whole prolonged episode of the search after the kingdom must be regarded as an unconscious endeavour on B.'s part to adapt himself and find in the great world that for which he unwittingly craved. It represents his life-history in allegory.

To see and take possession of something new was the declared motive for founding the kingdom, but the secrecy which enveloped it all recalls the secrecy enjoined by the nursemaid and the darkness stipulated by his school-mate as being essential to success. His later fugues are only a morbid development of these searching and acquisitive impulses, at a time when the repressed was threatening to break out. In the fugue he courted secrecy during the day by avoiding the main roads, but at night guided himself by the light of a star; the latter taking the place of the key-hole in promising and threatening to reveal something of importance to him. At the time of his confirmation we notice an important religious sublimation of these tendencies assuming the form of a conscious decision to establish the kingdom of his Heavenly Father. To do this it seems to B. that, much as he loves home, he must go far away from it, and he chooses China, the land where heathen worship their fathers and ancestors, as the field for his activities. Now he cryptically informs his mother that he is ready for the sacrifice, ready to leave her, ready in fact to renounce his unconscious incestuous wishes. Thus do we witness the Oedipus Complex exhibited in almost classical form, a complex which, as Freud has taught us, lies at the root of troubles such as those which disturbed the subject of this analysis.

Yet although B. blinds himself and attempts the great sacrifice he remains unsatisfied and his craving for forgiveness constantly appears throughout his career. That this need is in some way connected with his father he shows by postponing confession on the pretext that his father would disapprove, but even after he has forced himself to it there remains an ill-defined yearning as though something more than he has performed is required of him.

Attempts to rebut this by reasoning only add to his restless dissatisfaction. When he goes to Oxford his studies necessitate a deliberate criticism of things hitherto accepted and made use of in the ends of



sublimation. This endangers the sublimation and is therefore strongly resisted. The old symptom of blindness again appropriately enough comes to the rescue and secures a return home for a season rather than a continuation of dangerous studies or the acceptance of the sacrifice to go forth into a distant mission field. Even after his ordination and his attempt thereby to attain a satisfactory sublimation the denied and repressed impulse continues its powerful though unconscious activity. Thus B. always feels as though he were in some inexplicable way in the wrong; as though he lacks something; as though others—his cousin and the senior curate—have stolen a march on him. He ignores rather than avoids women, remains bound to his home and endeavours to concentrate all his energy upon his work: that is to say, endeavours to utilise it all in the direction of sublimation. Such an attitude, however, proves untenable, and numerous symptoms betray the crude activity of the repressed.

Taking B.'s first recurrent dream—that of climbing the church steeple—we can see how, under the guise of attempting to mount heavenwards by means of ecclesiastical ministry, crude sexual strivings gain expression. Thus as Freud has so forcibly pointed out, "the very thing which has been chosen as a means of repression becomes the carrier of the thing recurring; in and behind the agencies of repression the material repressed finally asserts itself victoriously<sup>1</sup>." Lest in the case of B. the above interpretation be considered fanciful let me give his own free associations to the dream.

Climbing: "Once when on a tour on Dartmoor with C. I saw two ponies copulating. I was very much embarrassed and pointed out a view in the opposite direction. I did not want to see it. I remember what the nursemaid told me about a man climbing up on a woman. Practising swimming face downwards on a bed."

Church steeple: "I think of the dark narrow approach through an avenue of trees to the parish church. I am afraid in the dark. I think of my other dream, where it is dark and I am looking for someone. I was a special constable at that time and was proud of my bâton."

Not reaching to top: "I often seem to be trying for things which elude me. I remember failing to gain the leaving scholarship from school: I felt as if everybody knew, and I was more ashamed than disappointed. I always liked to take the lead in everything. I took the lead with C. about our tours, yet the kingdom never entirely satisfied me. I often

<sup>1</sup> *Delusion and Dream*, p. 144.

had a feeling that something was wrong; left out. My sister always allowed me to have my own way in all our games."

Feeling tired: "This seems to be connected with the dream. I am disgusted at having dreamed it."

Both the symptoms and symbols made use of by B. are very general ones, belonging to what has been described as the collective unconscious, but it is interesting to find how B. himself came by them. It should indeed be the rule in analysis to probe as far as possible in each individual case for the meaning and origin of a symbol even when its general and usual significance is well established. As Pfister has said, "symbols are inexhaustible"; and we are not concerned with a complete analysis of everything that is condensed into this dream. It suffices to point out that the innocent manifest wish to climb upwards conceals a deeper repressed wish of a crudely sexual nature.

It seems almost as though B. were dimly aware of this, for the feeling of tiredness which accompanies the veiled partial realisation of this wish is associated with a disgust at himself. A disgust in no way justified by the manifest content of the dream.

At the time when B. first had this dream he was away from home practically for the first time and was taking a prominent part in the Boy Scout movement. We may also recall that the man who attempted sexually to play with B. was commander of a Boys' Brigade. Recall also the difficulty which B. was experiencing because his confirmation classes involved talks on purity and brought to mind his own earlier strivings. Now in the dream associations, C., the intimate friend who replaced his sister at age ten, and accompanied him in all his quests, is twice referred to in connexion with repressed sexual matters. From these things we may infer that the damming up of the normal direction to his long repressed impulse tended to divert the latter towards a regressive outlet in homosexuality. This would account not only for the disgust which he felt over the dream, but also for the increased guilt which oppressed his daily parochial life, and more important still, for his exaggerated emotion and disproportionate action when a certain clergyman was accused of paederastia. Be this as it may, he tries to exorcise these tormenting feelings by prayer and fasting at the ten weeks' continuous intercession service. The denied impulses, however, prove too strong for complete repression and B. is again forced to give up and take another rest.

It is towards the end of this holiday that B. suddenly feels so curiously elated. Feels that he has, at last, a right to what he sees and that without

wrong there is more for him to see. The idea of a honeymoon actually enters his head. To his conscious mind the honeymoon presents itself abstractly, almost as a figure of speech, and is in no way related to her who should share it with him. Nevertheless he does connect the idea with his former quests, for he writes to C. that his new discovery is a most desirable acquisition to the kingdom. What, we may ask, can have produced this change of feeling? At first the cause remained obscure, but, as in the preceding history, events have been placed in chronological order, the reader will be in possession of the clue. B., on returning to partial work, is more restless than ever, and more aware that something in his life needs explanation. At this time the second recurrent dream makes its appearance. In this dream B. pictures himself as walking along a narrow path in the dark; there are towering cliffs on one hand and a river on the other; always he is looking for someone, who is hidden round a corner; the water of the river sometimes flows across his path, and then he fears to go on lest there should be no sure foundation under it; occasionally he is irritated and confused by a ray of light which flashes for a moment right into his eyes. From this dream he awakes in a fright.

Knowing what we do now of B.'s history, the interpretation does not present much difficulty. The dark narrow path reveals itself as his path through life. It reminds him of the darkness which he experienced when preaching to his sister and of the darkness which results from his intermittent blindness. The towering cliffs bring to his mind the towering size of the man who had attempted to play with him sexually. Then he thinks of Falstaff, whom he regards as the incarnation of the physical and primitive with his great bulk, his crude jokes and his boasting, but cowardly attitude. Threatening cliffs, great size and the mass of the bed clothes pressing on him make B. think directly of sexuality.

The water brings suddenly to his mind the stream of generation and he remarks excitedly, "I think of immortality; my children carrying on even when I am dead." (We may here remember B.'s early associations with water = urine = developing chemical = impregnating fluid.) No foundation under the water when it floods over reminds him of the feeling he had at Oxford—"where should I stand if the Bible proved untrue: I should have no foundation in my life." The water evidently requires to be kept in its proper channel, but constantly threatens to break bounds.

The light flashing in his eyes, the dread of which occurs also apart from the dream, brings before him times when he has been, as it were, wilfully blind. "Many times he has been aware of the double-barrelled

feeling of wishing to see things and yet at the same time wishing not to see them"; a feeling which has invariably been accompanied by irritability. Now he thinks of the text, "Blessed are the pure in heart for they shall see God." The converse of this—"if your eyes have been used to look at sin they will never be able to see God"—was a phrase underlined in one of his childish sermons after the Peeping Tom incident. It would seem that the flash of light he so much dreads because of what it may reveal has its origin in the ray of light which reached his childish eyes through the key-hole of the bath-room door. He sought then, yet feared to find, and so it has ever been with him. Only in his fugue did he follow the light at other times so irritating.

There still remains, undiscovered as yet, the person for whom he is looking. Is she (we are surely justified in saying she), like Zoë Bertgang, a living and acceptable reality or merely an unattainable phantom? The determination of this point is of considerable prognostic importance. B.'s history has shown us that the erotic need originally rooted in his mother became largely transferred to his sister, but then failed to progress normally.

In neither of these fixations can the need be satisfied, hence we desire to know if the hidden person in the dream conceals either of them, or if B. has succeeded, unconsciously, in making a further and suitable transference. Here we may recall the sudden change which came over B. on leaving London and going to Church Stretton for the last part of his holiday. Although the whole realm of sexuality lay under a strong taboo B. was obsessed with the idea that he possessed and had a right to what he saw. Actually what he saw was a hilly landscape belonging to someone else, so the feeling of conviction cannot have reference to it, but he also talked of a honeymoon and of adding something new, of supreme importance, to his kingdom.

The day following the analysis of this dream B. opened the interview by saying that, for some time past he had been feeling as though he would soon be at work again, and that he had written last night to a place in North London to ask if there were any chance of his working there. When questioned about this place and as to why he thought of taking up duties there rather than elsewhere he became confused, but then confessed that it was W., the place at which he had spent a part of his holiday with the old family friends. "Since then," said B. excitedly, "the father has died and I feel that I want to go and see them, I mean the girl, again. I have now made up my mind to go and see them. I am looking forward to it immensely. I realise that I want the girl."



Thus did B. become conscious of the identity of the person for whom he was searching. Now also he came to realise the true purport of his fugues, and was anxious deliberately to carry through to its appropriate end the last one which had been cut short at Banbury. B. continued the analysis for a few days longer, during which time he received, in response to his letter, a cordial invitation to stay at W. He now entirely abandoned his repression and had several frank talks with his father, in which he completely satisfied his old craving for confession, so that he went up to London with a clear head though with a palpitating heart. Five days later I received the following letter:

DEAR DOCTOR,

Veni, Vidi, Vici.

Thanks again very much indeed. G. K. is nearly twelve months older than myself but was, as I always dreamed, waiting for me. The first of my friends to whom I shall be able to introduce her is C., who is coming here tomorrow evening. I waited until my third evening here, but could wait no longer. Nothing is settled yet, but I shall probably settle down somewhere in North London.

With all good wishes from us both,

Yours sincerely,

B.

In such wise did B. find and win the missing princess and thereby secure his long sought kingdom.

The analysis, which thus ended as happily as in the case of Hanold, illustrates Freud's dictum, that "every psycho-analytical treatment is an attempt to free repressed love, which has formed a miserable compromise outlet in a symptom<sup>1</sup>."

The case of B. differs from that of Hanold in that the person of a physician had to be introduced in order to bring to light and normal function the repressed emotions. With this aspect of the transference I do not propose to deal. Experience shows that analysis is relatively short in duration and happy in outcome when a definite suitable object for the final transference has already been unconsciously selected. It is just on this account that events follow such a swift and satisfactory course in *Gradiva*; and may we add, here also. A second apparent difference between the case of B. and of Hanold is that so far as the story of the latter carries us his affections had known no other object than Zoë Bertgang, while we have seen in the psychic life of B. how the affections were successively though tardily displaced from mother to sister and only finally to G. K. The latter it will be noted is of the same age and profession as his sister and furthermore her father is dead, so that

<sup>1</sup> *Delusion and Dream*, p. 209.

B.'s actual present home closely resembles the phantasy of his childish days.

This second difference I consider only apparent, and one reason which has prompted me to publish the case of B., is just that it seems so clearly to throw light upon the type of influence which most probably was at the root of Hanold's repression.

The author of *Gradiva* states explicitly that Hanold "had not come into the world and grown up in natural freedom but already at birth had been hedged in by the grating with which family tradition by education and predestination had surrounded him<sup>1</sup>." As the only son of a university professor and antiquarian he was called upon to preserve, if possible to exalt, his father's name, and he clung loyally to this ideal even after the early death of his parents.

Of course, none of us are free from predestination considered as our innate tendencies, or from education as applied both consciously and unconsciously by those who surround us from the moment of our birth. But the early and subtle interplay of these factors is not sufficiently realised. Education is too generally regarded as something which is imparted at school, and if this fails to turn out a satisfactory individual well then heredity is blamed. The subtle moulding of the instinctive tendencies which takes place from our earliest moments is almost entirely overlooked.

We have seen that B.'s repression originated in infancy and therefore would already have been in existence even had his parents died early. The idea of exalting the father's name is a conspicuous feature with B., who also resembles Hanold in ignoring women and dedicating himself entirely to his work. The sublimation chosen by B., namely religion, is far commoner than that of archaeology preferred by Hanold, but in each case the direction of the sublimation follows the family tradition, which by education and predestination hedges in the young man.

The analysis as here presented is of course incomplete, and many obvious side issues present themselves for consideration.

My purpose has been merely to give the main theme—the leit motif—in the life of this young man because it illustrates with unusual clearness and intensity a by no means uncommon history. Unfortunately, all such conflicts, even when less intense, do not end so happily as did B.'s. In any case prevention is better than cure, and possibly the greatest merit of psycho-analytical research will, in the not far distant future, lie in its prophylactic rather than in its therapeutic application.

<sup>1</sup> *Delusion and Dream*, p. 25.

## STUDY OF A PHOBIA.

By S. E. HOOPER.

I BELIEVE it is held by most Psycho-Analysts that a Phobia is a reaction to a wish that has been repressed because of its incompatibility with the social mind, and that the fear so strongly felt in these cases is really due to the activity of a dissociated complex. This complex threatens to overwhelm the better self, and it is this ever present tension that engenders the fear. It is asserted that a mental shock is insufficient of itself to produce a phobia, although it may play a secondary part. Whilst then the phobia manifests itself as a fear of some external object or event, in reality it is the fear that would result from the unconscious wish or wishes becoming known.

Another school holds that a phobia is due to certain mental traumata. A body of emotion has been created which continues with the subject as an enduring legacy from past experience. The fear *is* this body of emotion projected upon some feature of the external world. It is admitted by adherents of this second theory that, as a result of traumata, a group of mental processes may also have become dissociated, which remain as a permanent effect of the experience. The two theories agree in the notion of dissociation; they differ in their conception of the primary cause. The former asserts that it is a repressed wish, the latter attributes the phobia to mental shock. I do not desire in this paper to take any one side in the controversy, realising that it is a matter for experts only with much experience. I prefer to let the facts speak for themselves.

The phobia which is the subject of this paper was one of storms, and later of any strong wind. The victim of this distressing condition, a married lady aged thirty, with one child, had lived for eight years in a semi-tropical climate. The life here was a very lonely one and there were serious difficulties of a financial nature. During the last six months her health gave way and an intense phobia developed. She returned to England a complete wreck and was under medical treatment for a year subsequently, other symptoms being, "Anaemia, weak and irregular heart-action, general weakness, dim eyesight." When I was first introduced to her she told me that her physician had recently pronounced her

organically sound and could not understand why she did not regain her strength. Her fear of storms had gradually extended to include every strong gust of wind, with a sense of panic, of some threat behind the storm, and a fear of Nature itself. I suggested that her phobia might be relieved by the method of psycho-analysis, and she was very eager for me to try to discover the cause of her irrational fear. I then began a course of analysis.

It will be well at the outset to give a description of the mental state of the subject when in the grip of the phobia.

It began with a sense of unreality and a queer dread of life in general. Later there followed a feeling of divided consciousness which made the mind seem as if it acted in two parts, one an "olive-green devil" that sat apart and mocked, the other a mere recorder of pain. Then came fear. Fear which seized upon the tropical storms, sudden, inevitable, devastating and ever-recurring. I hardly dared to leave the house lest a storm should overtake me, and yet when the storm was about to break I longed to rush out into it, to take the full brunt of it in my teeth, to face it boldly and get the worst over as soon as might be. When I awoke in the morning my first act was to look out of the window to see if any thunder-heads lowered. All day long I watched for them, and when the first distant rumble of thunder was heard a sick dread would steal over me and a sense of panic, growing more and more powerful as the storm approached, until the strain became so unendurable that to seek death at my own hands seemed the only solution. Then after the terrible anticipation was over and the storm had broken, came the helpless trembling and utter exhaustion that sapped my last ounce of courage. At night I feared to go to bed lest a storm should rush upon me in the darkness, feared most of all to undress because that increased the sense of helplessness, feared to sleep lest the terror should steal upon me unawares. There seemed to be something terrible and relentless behind and beyond the storm from the fear of which nothing could ever release me. Life became one infinite torment of suffering, for the terror walked by day and by night and never left me for a moment in peace.

This, I think, gives a vivid enough account of the distressed state of mind of the subject. It will be observed that there arose first a sense of unreality and dread of life in general. This was followed by a feeling of divided personality, and later came the fear of storms. Other points of interest in the description are (*a*) The longing to rush out into the storm, (*b*) The dread of undressing and going to bed, (*c*) The feeling that there was something terrible behind the storm.

#### ANALYSIS.

It is not possible to give a detailed story of the analysis, but a brief account of one or two of the most significant features in the process will, it is hoped, enable the reader to understand how the constituents of the phobia were discovered.



During the early stages significant memories of her early life came up for discussion. It transpired that her parents were very religious, "with early-Victorian notions of sex"; the mother sympathetic and kind but with no knowledge or wisdom in child-training, the father irritable and without any understanding of children. The subject remarked of herself that she was a lively, high-spirited child, extravagant in affection and with a too vivid imagination, further that she was abnormally sensitive, fainting at the least physical pain.

Her memories up to eight years of age were happy and were chiefly concerned with a brother, one year older than herself, for whom she had a deep devotion. Later impressions of home life were on the whole unhappy. She describes herself as suffering from loneliness and a craving for affection, and states that the atmosphere of her home was unsympathetic. "I repressed all self-expression because my family 'jeered.'" The next period, school-days, was happier. The brother returned home from boarding-school and there was renewed companionship. Towards the end of her school life she became very religious. So she grew up to the age of nineteen dreamy and credulous, blind to the facts of life and utterly unpractical, when there occurred a brief but intense love-affair which ended disastrously. The engagement was abruptly broken off, her whole character seemed entirely changed by the experience, and there ensued a reaction for two years to a period of 'wildness.' During these two years she rashly played with fire, taking however good care not to get scorched. Nevertheless she had some narrow escapes, being, on one adventure, half-choked by a man in a fit of anger. "My attitude to all my 'lovers' was always the same, first a brief but strong attraction ending in indifference or active dislike." At twenty-one she was married, spent eight years in the tropics until her health broke down, when she returned home.

As the analysis proceeded there were two dreams which proved of particular significance. The first, which came very soon, a single scene, recalled all the poignant memories of the disastrous love-affair. After this there was a temporary improvement in the symptoms, but in a few days' time the subject relapsed to an even greater panic of storms. Eventually came a dream which proved to be a moving-picture of the subject's whole life, and this furnished an important clue to the understanding of the phobia. On the surface it was just a history of her struggle for freedom of thought in religion. One incident however had much deeper significance and will here be given.

I was undressing in a small shed by the road-side and a man came and reprimanded me for indecency, ordering me to shut the door. I said "There is none or I would have." He however showed it to me, a moving panel that I had not recognised as a door. I shut it, but noticing that the shed was tumbling to pieces, thought matters were not much improved.

The man who accuses the dreamer of wickedness represents orthodox opinion, and the reprimand for indecency was a way of telling her that she might at least keep her opinions to herself—"closing the door." But closing the door is of little avail—"truth will out." Orthodoxy apparently is in a bad way, for the shed is tumbling to pieces. Now comes the deeper significance. It suggested to the dreamer in fact that the pleasures of childhood had been dominated by a friendship with a favourite brother. Further analysis recalled many painful experiences and ultimately brought enlightenment in regard to some of the constituents of the phobia. It was decided to probe to the bottom the significance of the 'undressing in a shed' incident. Generally it suggested dressing or undressing under unusual circumstances and the dreamer's own attitude towards it. Her own words were: "I was both surprised and hurt at the accusation of indecency, which is characteristic, for while the sense of shame was implanted in me at a very early age and is kept alive by my husband's attitude in the matter of sex, my natural attitude is one of extreme and even amazing innocence; an innocence which, joined to genuine ignorance, was partly responsible for the trouble which arose between myself and the man I loved. It all hinged on a misunderstanding of this very matter of sex." The incident moreover suggested several occasions of unconventional toilet. One during the "blissful but apprehensive days of my first engagement, one during school-days and one in very early childhood, both with reference to my brother."

When we had reached this stage in the analysis a sudden illumination seemed to come to the subject. "Oh mon dieu," she ejaculated, "It has just occurred to me that the storm symbolises sex. Sudden and fierce, pitiless, remorseless, inevitable—devastating in its effects when thwarted: or just plain troublesome and distracting." She was anxious to follow up this idea and explain how she came to view the matter of sex first with a sense of shame, and later with fear.

First there was a vague memory of a childish game of naked savages played with her brother. All the subject could remember about this was that she liked the game and wanted to play it, until her brother said it must be played in secret. Then there came a sense of surprise and dismay and she did not want to play it any more. It was the first stirring of shame.

Several minor incidents also occurred during early childhood which

gave the child an attitude of distaste, and later of disgust, towards the whole subject of sex. All this time the sense of shame and an apprehension of something indefinite but alarming could be traced growing stronger and stronger.

At the age of fourteen there occurred an incident with the brother which made a profound impression. This brother after various attempts to satisfy his curiosity came into her bedroom one morning and tried to pull off her nightdress. When she protested he assured her that there was no possible harm as he would not touch her, and she, being extremely innocent and ignorant, believed him and thought if it amused him why should it really matter? She was so much devoted to him that there was very little she would not have done for him. But the nightdress was torn, and her mother finding this asked how it happened. Quite readily the girl told the truth. The mother was terribly alarmed, but instead of speaking out made vague references to 'something happening before babies were born.' The girl did not understand in the least and was not sure if she would have a baby next week or not. She was terrified and ashamed, yet could not see wherein she had so greatly sinned. Finally she was told that she must go to confession and confess to the sin of impurity. For a long time after this she suffered agonies of shame and fear and burned with a sense of injustice. The companionship with the brother was temporarily destroyed, but finally she thrust the whole matter out of her thoughts and all but forgot about it. She recalls now however that for years afterwards she would dream from time to time of a quarrel with the brother from which she always awoke in a state of intense anger and with a hatred towards him which took days to wear off.

This was not however all. At the age of sixteen a strange man tried to lure the subject away, frightening and disgusting her very much by his alarming conversation which she did not altogether understand.

Finally at the age of nineteen, still ignorant and wilfully turning away from knowledge because of this sense of shame and fear, she was seized and overwhelmed by love at first sight. The love was reciprocated, but circumstances were all against the lovers. Moreover the subject happened to be staying at the time in a strange and rather disturbing atmosphere amongst people whom she did not understand and with whom she was nervous and unhappy. She was staying with a couple who, as she only discovered later, were not legally married, who used to have violent quarrels, and between whom love seemed to her to be a thing fierce and cruel. As she put it to me, "I felt myself sur-

rounded by disturbing and uncomprehended elements and was utterly at the mercy of circumstances because of my ignorance." From the first there were many difficulties and obstacles in the way of a happy completion of her love. She feared from the beginning that it was foredoomed to disaster, that trouble would inevitably come, and knew too what the cost would be. It came as she had anticipated, the engagement was abruptly broken off, and a period of acute mental suffering followed.

Before the débâcle she had been staying in the neighbourhood in which her lover lived, but her joy was marred by the malice of a man who sought to undermine her lover's confidence in her and was only too successful. To escape from these and other difficulties she returned to her home, but with a dreadful apprehension that she would never see her lover again. At first they corresponded regularly, but soon clouds arose on the horizon. The young man one day wrote to her something in the nature of a confession of his past life and was anxious for assurance that his few sex-adventures would not mar their relationship. This assurance was readily given. Then another letter followed from the man in which he gave certain 'medical' reasons for his adventures, remarking that the 'nature' of man necessitated the satisfaction of his sexual needs. The recipient of this letter, be it remembered, was a young girl of nineteen whose only education in the matter of sex had been such as to associate it either with dread or shame. This second letter frightened her. She was attacked by terrifying thoughts about the 'nature' of man, and with doubts as to whether her fiancé were "one of those men in whom love is nothing but a fierce and ugly passion." She tried hard to be sensible and reasonable in the matter but seemed to herself to be "in the grip of a power stronger than herself which she did not understand." However she thrust these troublesome thoughts aside and all went well for a little while. Then her enemy gradually succeeded in poisoning the mind of her fiancé against her. Strained relations arose in consequence of a misunderstanding and misrepresentation of the matter of sex, and the engagement came to a sudden end. The subject now recalls that when this first happened there was an instant's intense relief. The blow for some time *anticipated* had fallen, the worst was over and there could be no more suspense. Immediately after however she collapsed on the floor in a state of unconsciousness, for a long silence before the fateful letter arrived had strained her nerves to the utmost.

All the facts relevant for the understanding of the phobia have, I think, now been given. It certainly seemed to the subject to symbolise



a fear of sex. Considering what her experience had been she remarked to me one day, "What wonder that a fear of matters sexual should seize me in its grip." When asked why she thought the fear had become attached to storms, she replied, "The reason is obvious, fear of sex would be fear of Nature, and would naturally attach itself to Nature in a savage mood."

Other features of an actual storm appeared to have psychological significance:

(1) First it transpired that the anticipation of the storm was the most terrible part. This had its counterpart at the time of the love affair. As the subject put it, "First love is always, I should think, a matter of apprehension to a young girl, especially when she has been brought up in the old fashion of ignorance and shame in matters of sex,—there were undercurrents that filled me with vague apprehension all the time—I feared from the first—disaster—which made the joy all the more intense, yet the whole time one of terrible unrest. Twice I was seized by a fierce panic of terror, of nothing tangible, just a dim threat.—That time was so like the storms, now I dare to look back boldly. First the wild exhilaration, mingled with growing, ever growing, fear and panic; the swift rush of events towards a half-apprehended disaster; a brief, terrible, tension and a swift crash." What was the reason for this sense of panic and terror of the intangible? From the present standpoint the subject thinks she can explain it, and interprets it now as having been a fear of love itself and its consequences.

(2) It was not the storm itself, nor any fear of physical injury, but rather something behind the storm that was so greatly feared. This state of mind during a storm was a representation of that general fear of 'Nature,' more particularly man's nature, as something fierce and terrifying that we have seen was a characteristic of the subject's mind during the love episode.

(3) The subject was deeply impressed by the suddenness of the tropical storms. Here again the love affair supplies its analogue.

"I wonder if there is any connection between the two, the sudden violent gusts of emotion, and the sudden onslaught of a tropical storm. They seem so much alike, bursting suddenly, sweeping all before them, and leaving an exhausted wreck behind."

## SUBSIDIARY FEATURES.

One or two further points in the case are of interest.

(a) After the love affair that ended so disastrously, the subject threw religion to the winds and launched out into a life of gaiety and wildness for a period of two years. In talking over this period it seemed to her that she was either trying to soothe her pain by inflicting suffering on others—"hitting back"—playing with fire but at the same time taking good care that she did not get burned herself, or else, solacing herself by baiting, and then adroitly evading, the very thing she feared.—"Conquering it, so it seemed to me perhaps."

(b) On several occasions the subject had been guilty of inexplicable acts of cruelty. These acts surprised her greatly, as she was by nature kind and gentle. On one occasion (after marriage), she thrashed her dog unmercifully although she was very fond of him. On another occasion, at the age of nine, she tried to drown a cat. On a third, at four years old, she viciously crushed a slug. These seemed to be of the nature of compulsive acts. The dog so cruelly punished had gone after another dog, 'at the call of nature.' The cat was ill-treated because cats had brought her shame when she had innocently remarked in public to her horrified mother that the cat, which was about to have kittens, was much too fat. The slug was crushed 'because it was naked,' by comparison with a snail. This occurred after it had been brought home to her that 'nakedness' was considered wrong.

(c) During the analysis, the subject awoke from a rambling dream with a piece of knowledge she had not before possessed, namely, that the dread of life generally, and of storms, was much more active when she was with her husband. She recalled that on a certain day, when he had just sailed for the East, there was a bad gale, but it was not until she saw reference to it in the papers that she realised that there was any cause for anxiety. When talking this interesting fact over with the subject towards the end of the analysis she remarked, "I can see now why this was so. I did not fear storms so much when my husband was away because the fear would then be less active, the subject of sex less prominent to me."

(d) The desire to rush out into the storm. "Thinking this over, I feel it means a desire to get the worst over as soon as possible." In the love episode there was a time towards the end of the engagement of anxious suspense, when the subject was waiting for the expected final blow to fall. It looks as if the desire to rush out into the storm in order to "get

the worst over as soon as possible," might be a reproduction of this painful state of suspense.

#### CONCLUSION.

According to the Freudian theory, analysis should have revealed the fact that in childhood sensuous pleasure was obtained from one or other of the various forms of infantile sexuality; that repression took place later forming an 'unconscious' region which, when it had grown sufficiently strong to provoke a severe tension between it and the conscious, gave rise to the phobia.

The only event in early childhood which might perhaps be thought to come under one of these categories of 'infantile sexuality' was the game of 'naked savages' which the subject played with her brother. Did this game reveal a pleasure in exhibiting the naked body, which in a strict sense might be called 'sexual,' because when adults do this they are under the sway of sexual feeling? Did it result in an exhibitionist tendency being repressed until it became unconscious and the nucleus of an unconscious complex? The subject and I discussed this matter at great length on all sides, and she was very persistent in affirming that there was no sensuous pleasure tendency here. She feels convinced that there was nothing more than the delight all small children feel in getting away from the restriction of clothing. It is admitted, however, that when she found it was considered wrong, and if played at all must be played in secret, shame was aroused, and was in all probability the beginning of what later grew into an attitude of disgust, and later of fear, of sex in general.

In consequence of the great importance attached by the Freudian school to family relationships, a further point in connection with the subject's childhood ought not perhaps to be passed over in silence. This is the great devotion felt towards the favourite brother. Was this affection in every way normal, or did it result in an incestuous fixation of the 'libido'? It is urged by psycho-analysts that not infrequently the filial love which a daughter lavishes on her father is accompanied by a dissociation of the physical from the psychical side of love. Thereafter her love life remains mutilated and she is never happy because she feels that life holds something that she has missed. It is said that the same disastrous results may follow in the case of a sister having too great a devotion to her brother. Was this the case with our subject? There is no evidence that it was so. Indeed the facts seem to furnish positive evidence the other way. For at the age of nineteen there occurred the

love episode which awoke very strong emotions, so strong in fact that they 'seared' her. This love experience was not merely psychical, but very full-blooded indeed.

It seems difficult then to bring this case under the category of repressed infantile sexuality, if this means strictly that sensuous pleasure once enjoyed was subsequently repressed. We must therefore try to proffer some other explanation. The facts suggest that it was the great emotional disturbance engendered by the love affair as well as the accumulation of the childhood experiences that were responsible for the phobia. During childhood we get first shame, merging into disgust and becoming at the time of the 'nightdress incident' genuine fear. This fear was augmented at the age of sixteen by the encounter with the strange man. Although none of these incidents were forgotten, it may be said that this fear was put out of sight, *because it was never recognised as a fear of sex*. Only by analysis was this revealed. By the time of the love-affair, the fear had gained considerable strength underground, so to speak, and the circumstances surrounding this episode tended strongly to increase the fear. But this was not all. Even after the termination of the engagement, the subject had various experiences which would intensify this hidden fear, on the occasion, for example, when she was nearly strangled by a man. All these adventures and narrow escapes, when, in her 'wild' time, she was playing with fire, must have been an aggravation of this hidden fear. Moreover at the time when she married she had to fight and conquer an intense repugnance. Subsequently, while in the tropics, there was always, in the background, the 'Black' menace, which the subject informs me assumed greater proportions the winter before phobia-time.

But the love-affair, "terrible in its suddenness, its anticipation of trouble mingling with and counteracting the joy, its element of half-understood circumstances, its presentation of sex in a terrifying aspect," was an equally important constituent of the phobia. It is a question whether, without this experience which generated a sentiment comprising many strong emotions destined to become undetached, the phobia would have occurred. Indeed it was at this time that there appeared the 'olive-green devil who mocked' and who was born when "wheels spun round in my head and missed the clutch," indicating, as it seems to me, dissociation of the mind. The storm typified this actual experience as well as sex in general. As the subject put it, "The storms, so like my own general impression of sex and my supreme crisis in particular, provided a logical and natural object on to which the fear might be pro-



jected." It so happened, then, that when her physical resistance was weakened by the effect of the climate, anxiety, and various other troubles, the dissociated emotions were too strong to be longer held in check, and so had to find an outlet.

If our interpretation be correct, the factors in the phobia are:

(a) A hidden system of fear of the vague unrealised elements in the sex life which had originated in childhood and had become consolidated in adolescence.

(b) A body of emotion left as a legacy from the subject's love episode.

(c) The process known as 'transference of feelings' or 'displacement' viz. the attributing a sentiment to an object which does not itself cause it—the object in this case being the natural phenomenon of a storm.

It was not until the subject had been brought to recognise that a storm symbolised sex in general, and that the tropical storm was a reproduction of the whole love tragedy, that the tension was released, and a complete cure effected.

The transference, and therefore the analysis, ended with dreams peculiarly appropriate to this view. There were two funerals, the first in which the coffin was carried on a steam-roller and the mourners followed on steam-tractors, signifying a slow and heavy process of crushing underground; the second conducted with triumphant ceremonial in a Church, with music, vestments, lights and even a Bishop. This was the orthodox, the real burial (the process of psycho-analysis), and from this came joy and an exquisite sense of freedom,—“a new birth indeed.”

## A PERSONAL EXPERIENCE OF THE NIGHT JOURNEY UNDER THE SEA<sup>1</sup>.

BY JOAN CORRIE.

DR JUNG in his *Psychology of the Unconscious* has familiarized us with the conception of the Sun-God's "night journey under the sea," and the subject of my paper is my personal experience of that journey undertaken during the early months of this year.

We are all acquainted with the fact of the recapitulation in the life-history of the individual of the physical and psychological steps by which the race has evolved from the lowest forms of life. In our pre-natal existence we ascend from a single cell, through lower embryonic forms, to the perfect human infant, and psychologically we recapitulate the mental development of the race as we pass through our own infancy and childhood to adult life. In the long upward climb of the race no experience has been lost, and just as physically we carry about with us vestigial remains of organs no longer necessary to our well-being, so we retain in the psyche traces and memories of experiences lived through ancestrally, which reappear from time to time in our dreams. This we know, but perhaps it is less generally understood that a person during the course of psychological analysis may literally undergo just such an experience as primitive man embodied in myth, religious belief or ritual, such, for instance, as the night journey under the sea.

It was natural that primitives, as they watched the Sun 'go West' every evening devoured by the ocean monster, should have thought of it as a death, and of the flaming sunrise as a rebirth after the passage below the sea. Dr Jung quotes Frobenius, who says: "Perhaps in connection with the blood-red sunrise the idea occurs that here a birth takes place, the birth of a young son: the question then arises inevitably, whence comes the paternity? How has the woman become pregnant? And since this woman symbolizes the same idea as the fish, which means the sea (because we proceed from the assumption that the Sun descends into the sea as well as arises from it) thus the curious primitive answer is that this sea has previously swallowed the old Sun. Consequently the

<sup>1</sup> Read at a meeting of the Zürich Psychological Club, on July 10, 1922.

resulting myth is that the woman (sea) has formerly devoured the Sun and now brings a new Sun into the world, and thus she has become pregnant."

Here the sea is the mother and the God has performed the night journey in her womb. Sometimes it is a fish which conveys the hero, as Jonah's immortal whale. Sometimes the receptacle is a box or chest as in the case of Osiris, whose body enclosed in a coffer was cast into the Nile, later to be reborn as Horus. In one form or another the theme of death and rebirth, or of the disappearance of the hero and his subsequent return, is universal. Tammuz returns from the underworld, rescued by Ishtar. His Greek counterpart, Adonis, who was hidden in a chest as a babe by Aphrodite, and deposited in Hades, returns and spends alternate cycles of time in the upper and lower worlds. Dionysus brings back his mother, Semelê, from the dead, Orpheus descends to recover Eurydice. J. M. Robertson says, in *Mythology and Christianity*: "The same conception is fully developed in the Northern myth of the Sun-God, Balder, who, wounded in a great battle...goes to the underworld of Hel, where he grows strong again by drinking sacred mead, and whence he is to return at the ...Twilight of the Gods, when Gods and men are alike to be regenerated." The same motive is seen in the legend of our own King Arthur, who, wounded unto death in his last great battle with Mordred in the West, hies him to the island valley of Avalon there to heal him of his grievous wound, and from whence he will return.

The idea is dominant in most of the great religious cults. The death and resurrection of the God were ceremonially enacted in the annual festivals of Adonis and Attis. In the mysteries of Mithra a stone image representing the God was placed on a bier by night, and liturgically worshipped. Robertson writes: "This symbolical corpse is then placed in the tomb and after a time is withdrawn, whereupon the worshippers rejoice, exhorting one another to be of good hope, lights are brought in, and the priest anoints the throats of the devotees murmuring slowly: 'Be of good courage; ye have been instructed in the mysteries; and ye shall have salvation from your sorrow.'"

The great and wonderful religion of Egypt is, of course, the crowning example of the ubiquity of the rebirth idea. The abode of the dead, of whom Osiris was judge and ruler, was called *Tuat*. To this place the dead Sun-God went at night. Dr Budge, in his great work on Egyptian religion, tells us it was a gloomy valley situated between heaven and earth, shut in on each side by mountains and beset by evil spirits, beasts, and demons, waiting to harass the souls of the dead. A great river ran

through this valley which began in the west and ended in the east. In the Boat of Osiris as it passed through Tuat, and so directly under the protection of the dead Sun-God, all those souls travelled whose bodies had been buried with the requisite ceremonies, and, sharing in the death of "the chief of chiefs divine," the triumphant souls shared also in his resurrection.

"I am the God of the morning," cries one in Chap. xiii of the *Book of the Dead*, quoted by Brinton: "I have finished the journey and worshipped the Sun in the lower world...I have finished the journey and worshipped Osiris."

In nearly all initiation ceremonies a mimie death of the past, and a rebirth into a new future, form a conspicuous part of the ritual. The child is dead: the man is born: is the lesson inculcated.

The slaying of the dragon by the hero, the rescue of the princess, the finding of the treasure after dangerous striving, are all familiar to us in Folk-lore, and express the same thought: "the conquest of death," and a new richness of existence. Dr Jung has told us in the *Psychology of the Unconscious* who the hero or God is. He says: "The hero who is to accomplish the regeneration of the world and the conquest of death, is the libido, which, brooding upon itself in introversion, coiling as a snake around its own egg, apparently threatens life with a poisonous bite, in order to lead it to death, and from that darkness, conquering itself, gives birth to itself again."

It is now time to relate my own experience. It began about September last with the dream of a child about to be born. A rather severe problem was filling my mind at the time, namely, whether I should give up the rooms which I occupied in London in the house of a friend and come here. I could not afford to keep them on if I came to Switzerland for an indefinite period as I wished to do, and there were other reasons why it might be wise to leave my friend, but it practically meant giving up a home in which I had been very happy. So it was not easy to decide, though the urge to come to Zürich was very strong.

In this dilemma I dreamed that I was lying on the *left* side of a bed, and before the woman doctor present, who is a personal friend and an extravert, could deliver me of the child, it was necessary for me to move to the *right* side. The left side in dreams is always the wrong side; as, in the Apocalyptic Vision, the souls of the wicked are on the left hand of the Judge. It seemed to me, therefore, that I was called on by the dream to consciously extravert and take action, and I accordingly relinquished my rooms and prepared to come here.



In October there was a message from the unconscious hinting at death. I saw in a dream a long, flat slab or pedestal, but the sculptured figure for which it was designed was not yet placed on it.

In January the regression of libido became very marked and the waters closed over me, or, to change the figure, I entered the Western Gate of Tuat. In retrospect my experience has seemed to me to bear a strong resemblance to that of the Pilgrim when passing through the Valley of the Shadow of Death in Bunyan's famous Allegory, for we are told that over that valley "hang the discouraging clouds of confusion, and death also doth always spread his wings over it." Moreover, the terrors which beset the Pilgrim were intangible things that "cared not for his sword."

My dreams during this period, which lasted many weeks, were at first mostly death dreams. I will narrate a few.

(1) The body of my mother is borne downstairs to be buried.

(2) I see a steamer on the sea. A man who is a prisoner escapes into the water and swims. While he is there he cannot be re-captured. My associations connected the boat with the body, and the escaped prisoner with the soul. It is the ocean of death and the prisoner is free. The conflict between death and a desire for life is symbolized in another dream the same night by a cat, which animal, we say, has nine lives. It hides under a piece of furniture and has to be dragged out by force. In the *Book of the Dead*, quoted by Budge in his *Gods of the Egyptians*, we find that "Ra took the form of a cat and slew Apep, the prince of darkness, who had taken the form of a monster serpent, in the first battle which the god of light waged against the fiends of darkness at Annu (Heliopolis) after which he rose in the form of the sun upon the world." *My* cat form was not yet triumphant.

I ought to say here that twenty years ago my death was foretold by a world-famous palmist to take place during the year which ended in March last, so that it was not, perhaps, unnatural that I should be apprehensive that it was actual physical death with which my dreams were concerned.

(3) In the next dream I see an open door leading into outer darkness. I am to pass through it, but I shrink back from doing so. On waking I say to myself, "It is the Bridge of Death."

One of the most important dreams was the next. It exactly described my condition and is as follows:

(4) I am to go to Dr Jung for analysis, but I forget whether the appointment is for three o'clock or for three-thirty. I decide to go at

three, to make sure of being in time. I see a dead bird like a dove on the floor. I have touched it with my foot which is contaminated by its corruption. When I awake I think, "My soul is dead."

My associations referred to the primitive idea of birds being souls, to the Holy Spirit appearing as a dove, and to the Trinity.

Perhaps a parallel to the dead dove may appear in the fact that primitives believe that the life or soul can be disengaged from the body without harm so long as the object which receives it remains intact. Frazer says: "The advantage of this is that so long as the soul remains unharmed in the place where he has deposited it, the man himself is immortal; nothing can kill his body since his life is not in it." On the other hand, if an animate object containing the soul is injured or is killed, the man suffers correspondingly. Frazer gives many examples from Folk-lore illustrating this. One modern Greek story tells of an ogre whose strength is in two doves, "and when the hero kills one of them, the monster cries out, 'Ah, woe is me: Half my life is gone. Something must have happened to one of the doves.' When the second dove is killed, he dies."

Analysis showed that whether the appointment with Dr Jung in the dream was for three or three-thirty, the third hour was already ended, the third person of the Trinity was dead, and I was living in the fourth hour, which, as it did not belong to either person of the Godhead, must be ruled over by the Devil.

The first dream, in which the mother is carried out to be buried, expresses the same idea, for in the Egyptian Trinity of Osiris, Isis and Horus, the Holy Spirit is replaced by the mother. Frazer says in *The Dying God*: "If the Christian doctrine of the Trinity took shape under Egyptian influence, the function originally assigned to the Holy Spirit may have been that of the divine mother. In the apocryphal Gospel to the Hebrews...Christ spoke of the Holy Ghost as his mother... 'My mother the Holy Spirit took me a moment ago by one of my hairs and carried me away to the great Mount Tabor'." The Gnostics also called the Holy Spirit "the First Woman," or "Mother of all living."

(5) In the fifth dream I write to a friend who is a Presbyterian minister in Scotland, and tell him my mother is dead.

(6) I see a bed on which a mother and daughter are lying. The daughter is dead, but the mother is unaware of the fact. I feel I cannot tell her, and ask someone else to undertake the task. When this has been done, I return and tell the mother I knew she was dead. She replies, "Then, in the name of God, why didn't you say so?"

Another theme is blended with that of death in some dreams, namely, that of contempt for the organized forms and beliefs of Christianity.

(1) I put two buttons instead of money into a collecting-box in church, held out to me by a clergyman, and am reproved by him for doing so.

(2) In this dream I have come to the end of a journey. I get out of a carriage, and see part, though not quite all, of my luggage deposited on the ground. I say "Good-bye" to a lady I know who remains seated and is presumably going on. She is a sweet and gracious personality, whose church and simple orthodox faith mean much to her. As I shake hands with her *she gives me the bill*. There is always an account rendered from the past! Nevertheless, there is a hint of something new, for I see, in another dream the same night, the figure of an old friend who was a modern languages student at Newnham College when we first met. She stood with a short pipe in her mouth, a figure of the ultra new woman, as against the somewhat Victorian lady who had given me the bill, but she did not speak and I only saw her picture, as it were. The new was not yet ready to emerge into consciousness.

During these weeks my vitality of body and mind was very low. Physically I was anaemic, and suffered from palpitation and breathlessness. Mentally I was depressed and apprehensive, passing through the Valley of the Shadow. A dream at this time showed my individuality to be sick, and no longer capable of holding the balance between introversion and extraversion. I was in a state of dissolution, living in an underworld of shades which were bloodless and unreal. Consciously I was miserable, burdened with a dull weight of depression which at times felt unendurable, though no adequate concrete reason for it existed. The cheerfulness of others was irritating. It seemed too much trouble to smile or be glad. The present was viewed through eyes which, for the most part, saw only negative aspects. I was dissatisfied, critical, vacillating. The future was regarded with more or less cynicism. It appeared unlikely that any aim would ever be realized, any hope fulfilled. I felt useless, homeless, hopeless, ill in mind and body. The 'hero' had gone down to hades, taking the positive, constructive libido with him, and death and disintegration were the result.

At this point strange and terrifying phenomena occurred. The libido found and revived archaic images which were externalized in consciousness, chiefly in the form of sound. Sharp, explosive cracks, like pistol shots, not to be explained by change of weather or of temperature, occurred in the dead of night when I awoke from my first sleep. Some-

times the explosion sounded near my bed, sometimes it came from other parts of the room. On one occasion the projection assumed a momentary life, for a phantom *Something*, like an intangible cat, leaped on my bed, startling me into uttering an involuntary scream.

The noises came very rarely by day, but they occurred nightly for about a fortnight, and then ceased as abruptly as they had begun. Three or four weeks later, soon after going to bed one night, I heard three sharp explosions with a short pause between each, and since then they have ceased to trouble me.

About this time the libido began to ascend, and the character of the dreams changed. The motif of life began to creep in.

(1) I see deep water and think, "I have been at a lake but this is the sea."

(2) I see an erotic cat sitting by a window.

(3) I try to light a fire in order to fill a hot-water bottle for my 'sister.'

The next dream is more definite. I see rocks coloured with the light of sunset or of sunrise, and Dr Jung directs my gaze from them to some trees which grow near, the leaves of which are also coloured. The colour may be that of death or life, sunset or dawn: it is not yet certain which it is; but the trees at least are living things set side by side with the non-living rocks.

Now we come to a dream which seems to me to give the key-note, or to epitomise the experience and its issues.

I dream of a word, a 'nonsense word' it seems, given to me by a teacher but forgotten. It is the first among other objects in a specimen-case which Dr — of London is holding in his hands. When I awake I remember it. It is the magic word ABRAXAS. The previous dream had presented the separation of vital opposites. Sunset and sunrise are opposites: end and beginning. Rocks and trees are opposites: living and non-living. *Abraxas* presents the most tremendous of all the opposites: creation and destruction; emptiness and fulness; God and Devil. The unconscious in its own way exhibited to me these alternatives. Perhaps one only gets to know God through the Devil; life through experience of death.

We now come to dreams in which the symbols of death and resurrection follow one another or are combined, recalling initiation ceremonies, and marriage with creative possibilities.

In the first of these dreams I see through a window a new and empty burial ground, in which my father, who seems to symbolize the past,



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the 'old man,' is being buried in a solitary grave. No mourners are present and it seems very sad and lonely.

The next dream is a trifle complicated, but I will try and make it clear.

I call at the house of some people I have known since I was a child. friends of my parents called A— —. Mr A— — is dead, but his widow, now over eighty years of age, is living. She is characterized by an optimism which no sorrow can quench, and a religious attitude of the most naïve literalness. My visit is apparently to see her, but she meets me at the door of the room, preventing my entrance, and says Mr A— — wants me. I go to another room where he is sitting, and see there an attaché-case which has reappeared from the water into which I had thrown it. (In reality I have such a case in which I keep money and important papers.) Mr A— — then shows me a paragraph in a newspaper which says "Mrs Crowgate" had arrived, or would shortly arrive, in England. The lady, whom the dream designates by such an ominous name, is Mr A— —'s elder daughter, and her father and I understand, in the mysterious manner peculiar to dreams, that instead of being dead for many years, as we had supposed, and as is in reality the case, she had only been married, and resident in a far country from which she was returning.

In this dream the rebirth motif is clear. The return of the 'hero' is at hand, and, with a touch of humour, the unconscious announces the arrival in modern fashion by a newspaper paragraph. Taken in connection with the preceding dream, we have the whole drama of death and resurrection. The dead past is buried in its lonely grave, the new libido of the future is just arriving from the progressive Continent of America, not only alive but married, and therefore full of possibility.

The symbolism of the two following dreams resembles some of the beliefs and initiation ceremonies of primitives. In one I see a man, whose naked back is caked with clay, rise from out of the ground accompanied by a woman. She wraps a black cloak round her, the garb of mourning for the dead. It is the spirit of the dead ancestor who has come to communicate to me the wisdom and power he has acquired beyond the grave.

In a book on *Primitive Secret Societies*, by Hutton Webster, the author, following Frobenius, says that the intention of many initiation rites and ceremonies is "to assimilate the novice to the condition of spirits." He writes: "When, as especially in the African conceptions, the dead are considered as exercising much power over the living, there will exist a natural desire to assimilate one's self as much as possible to the condition of spirits and to become 'totengleich' and 'geistergleich' in order that

the spiritual power appertaining to the dead may be obtained. Puberty rites originate in a period when *manes* worship, totemism and ancestor cults prevail, and their significance is thus primarily religious rather than social."

The clay on the man's back in my dream shows that he was an initiate, one who had passed through the mysteries of death and rebirth, and who was therefore qualified to instruct me. Webster says: "The use of some substance, usually white clay, with which the novices are daubed over face and body is common throughout Australia and Africa. Doubtless some obscure connection exists here with the death and resurrection ideas. Pipe clay is often employed by the Australians as a sign of mourning for the dead. Moreover there is the widespread belief that after death the bodies of the natives become white."

The same custom is found among certain Indian tribes. The boys about to undergo initiation are painted white, or smeared with white clay. Frazer, in one of the volumes of *The Golden Bough*, quotes a passage from a book on *The Pagan Tribes of Borneo*, by Hose and McDougall, showing that among one of these peoples there is a belief in a spirit who constitutes himself a man's secret helper. It is usually the spirit of an ancestor or dead relative, and is called *ngarong*. It manifests itself first to the individual in a dream, and promises to be his secret helper. The parallel of my dream to these ideas is, I think, sufficiently clear.

In the next dream I am with my mother who, by a cruel and revolting operation, is preparing me for, or initiating me into the meaning of, marriage. Initiation ceremonies inaugurate the beginning of manhood and womanhood, and are intended as a preparation for marriage which usually follows immediately after their completion. Webster says: "The ceremonies which take place on the arrival of girls at puberty are distinctly less impressive than those of the boys." Some of their trials are, however, appalling enough. Some savage peoples perform an operation on the genitals of girls; in the case of other tribes, beating, stinging with ants, the infliction of gashes and incisions in the flesh, starvation and seclusion, sometimes for lengthened periods, are a few of the horrors undergone. Frazer tells us that girls often "die or are injured for life in consequence of the hardships they endure at this time."

In my dream I do not like the idea of marriage as it is there presented to me, and when I awake I am trying to break off my 'engagement' with the unknown figure of a man. The succeeding dream, however, warns me that victory is the reward of endurance.

I see a cat and a bulldog sitting facing each other on the platform of

a country railway station. They are perfectly passive, but I know that, with the inevitableness of an execution, the bulldog will kill the cat.

My little drama is nearly concluded. In the following dream I see the supreme figure of Protestant orthodoxy in England, the Primate of the Anglican Church, borne dead through the street. Head and all, he is swathed in wrappings of yellow silk, the royal colour of conservative China.

Lastly, I see a woman demolishing a grave. Bit by bit she flings its pieces to the winds, that its place may be known no more.

I have called the foregoing a drama, but it is more. It is essentially a religious experience. In the depths of the unconscious there was a call, an urge towards newness of life, but it was far below consciousness. Before new life can be born, that which is moribund and dragging out a sickly existence, neither alive nor dead, must die and be buried, thus making room for the new. In Biblical language, the 'old man' must be put off, and the 'new man' put on. In analytical language, there is a child to be born. As the grain of wheat must be put into the earth before it can bring forth fruit, so the libido must sink into the great deep of the unconscious to find the treasure. Mythologically, it is expressed by the "night journey under the sea," by the rescue of the princess and the slaying of the giant; or by the death and resurrection of the God. The death must be of the infantility and all it implies; the treasure means balance, proportion, eternal life.

So my libido went down and left me half alive, a kind of derelict on the sea of life. Its return was as sudden as a resurrection. From utter misery I sprang at a bound into life, hope, joy, and all the blessings of vitality. It was only the entrance into consciousness which was sudden. The 'night journey' occupied five months, and the process going on underground was only revealed by the series of dreams which, in their entirety, I have called a drama.

## CRITICAL NOTICE

*National Welfare and National Decay.* By WILLIAM McDougall, F.R.S.,  
Professor of Psychology in Harvard University, Formerly Reader  
in Mental Philosophy in the University of Oxford. Methuen and  
Co., Ltd. London, 1921. pp. vii + 214. Price 6s.

McDougall has written a thoroughly stimulating, suggestive, alarming and uncomfortable book; and in so doing he has doubtless succeeded in his aim—this aim, it would seem, being to awaken us from our post-war complacency to a realization of the importance of a subject which, while it intimately concerns all peoples, is, in the opinion of the author, quite especially urgent for the British people at the present time, for whom it appears “to overshadow and dwarf every other that any man of science could propose for its consideration.” McDougall’s main thesis is (1) that the curve representing the rise and fall of powerful nations is a parabola—a long ascent, an almost flat summit and a steep decline, (2) that this rapid decline is due to the failure of the stock to produce an adequate number of individuals possessing the mental characteristics requisite for the maintenance of a high civilization (this failure being intensified and accelerated by the ever-increasing complexity of life brought about by civilization itself), (3) that our western civilization (especially as represented by the British and American nations) has very probably reached its climax and “may even now be sliding down the curve of decline,” (4) that the only way of preventing or arresting this decline is by appropriate thought and action on eugenic lines.

In dealing with this sinister theme our author develops a wealth of argument, illustration and suggestive power which, even if it should fail to convince all his readers, will inevitably make them richer by many fruitful trains of thought in the fields both of psychology and of sociology. Treating its subject, as it does, from the psychological rather than from the more commonly adopted biological point of view, the book, in spite of its relatively modest size, undoubtedly constitutes a valuable addition to eugenic literature. Its attractive manner of exposition should also enable it to appeal to a larger circle of readers than that enjoyed by the majority of works of similar aim.

The book opens with an introductory chapter (the substance of which, the author tells us, was written some thirty years ago) entitled “The Island of Eugenia, the Phantasy of a Foolish Philosopher.” This chapter is cast in the form of a dialogue between a “Practical Man,” who is desirous of devoting to some philanthropic aim of permanent value the large fortune which his business ability has enabled him to amass, and a “Scientist,” who outlines a scheme in the realization of which his friend’s millions may be employed. This scheme consists in the foundation of a eugenic state—under British or American protection—which will be recruited from the best existing stocks, which will provide the means of perpetuating and multiplying these stocks and which will send forth desirable individuals to help in the work of all portions of the world. In some cases these individuals will marry and settle down in their



new homes, thus helping to perpetuate their desirable qualities here also; but in the majority of cases Eugenians will, it is suggested, continue to regard Eugenia as their true home, where they will bring up their families and whither they will return when their work is over—much in the same way as the members of the Indian Civil Service, though performing services of inestimable value in a distant portion of the globe, have remained Englishmen in the fullest sense of the word; men whose wives have been English women, whose children have been educated in England and who themselves return to England when their years of service abroad have been completed.

In the next three chapters McDougall deals with the general importance of the mental aspect of eugenics and indicates, in the way we have already outlined, the danger that besets our civilization from the probable failure of the stock to produce a sufficient number of individuals capable of dealing with the ever-increasing complexity of a civilized environment, especially in view of the dysgenic influences in virtue of which our race tends to be constantly recruited from its less desirable members. Emphasis is laid here upon the experimental evidence showing that the white races are superior in intelligence to the Negro and that within the British and American population those of higher social status are (statistically) superior in this respect to those of lower status. With the exception of the considerations with regard to the conative significance of Mr Waugh's experiments, on "concentration of attention," which, as they stand, seem based on somewhat inadequate foundations (there seems to have been no full report of Mr Waugh's work before the author as he wrote), this evidence is probably sufficient to convince most unprejudiced readers of the transmissibility of intelligence or at any rate to awaken them to the vast interest and importance of the subject and of the desirability of gathering further data by experimental methods.

In Chapters IV and V our author approaches the more difficult but if anything more important question of the inheritance of character qualities. Starting from a consideration of the differences between northern and southern European art as presented by Mr A. Gehring in his *Racial Contrasts*, he goes on to suggest that the Nordic race (his admiration for which is evidently considerable) is distinguished from the Mediterranean race by being more curious, less sociable, more introvert, more inclined to divorce, less inclined to homicide, more self-assertive, more inclined to break away from authority (*e.g.* in politics and religion) and better suited for colonizing distant countries because of its greater curiosity and lesser sociability. The Alpine race—which is preponderant in Germany—is, like the Mediterranean race, also distinguished by greater submissiveness—a trait that has played an important part in recent history, since the Junkers who have been the predominant military caste in modern Germany belong chiefly to the more self-assertive Nordic race.

These considerations are followed by a brief comparison between the Black and Red races in America. Whereas the former displays a marked power of adaptation to the conditions of western civilization, the latter will die rather than submit to such adaptation. These facts suggest that the Negro is characterized by a relatively high degree of extroversion, sociability and submissiveness, this latter being again a quality of particular historical importance.

Further considerations deal with the improvidence of primitive races. These races, McDougall suggests, are relatively lacking in the acquisitive impulse, an impulse which is, in his opinion, of the greatest importance for civilization (the neglect of which in communistic schemes makes the outlook

for such schemes hopeless, p. 131) and which probably tends to be developed among those who live in unproductive regions (the cold north in the case of the Nordic race, the desert in the case of the Semites).

These portions of the book are perhaps the most interesting of all from the point of view of the psychologist, and although the views put forward are admittedly provisional and tentative in character, they well deserve the serious attention of those who are interested in the question of racial mental differences and might well serve as working hypotheses for further research by more accurate methods. There is, however, one opinion advanced here with which it is more difficult to agree. Following apparently a suggestion of Jung's, McDougall says that "the famous theory of Freud...is a theory of the development and working of the mind which was evolved by a Jew who has studied chiefly Jewish patients; and it seems to appeal very strongly to Jews; many, perhaps the majority, of those physicians who accept it as a new gospel, a new revelation, are Jews. It looks as though this theory, which to me and to most men of my sort seems so strange, bizarre and fantastic, may be approximately true of the Jewish race" (p. 134). If, as seems to be the case, it is here implied that the theories of psycho-analysis hold good of the Jewish race but not of other races, it is, on *a priori* grounds, surely most unlikely that this can be true; and this unlikelihood is increased by the fact that in England, Switzerland and Holland, Freud's theories have now been corroborated on a very considerable scale by non-Jewish physicians working with non-Jewish patients, and by the further fact that these theories have been successfully applied to the explanation and elucidation of customs and beliefs of primitive peoples who are racially far removed from the Semites. These facts make it probable that the theories in question are true of all human races (or else of none at all).

The conclusion of Chapter V is devoted to the contention that "the innate basis of the mind may be far richer and more complex than is commonly assumed by the psychologists." This contention is supported by the consideration:— of Jung's "archetypes"; of the probable insufficiency of the Neo-Darwinian principle of the non-inheritance of acquired characters to account for the existing phenomena in the mental field; of the popular opinion in favour of a larger influence of heredity than is admitted by the Neo-Darwinians; of Freud's "primal phantasies," which the latter investigator is inclined to regard as a phylogenetic possession; of children's interest in objects (bears, ghosts, caves, etc.) which interested adults in the earlier history of the race; of the probable hereditary nature of the moral sentiments in children (which seem to be lacking in cases of moral imbecility and which may be brought into connection with racial differences in truthfulness, chastity, etc.); lastly, of the supposed fact that the blending of widely dissimilar races may produce individuals who are "seriously defective in some obscure and ill-defined way." "All these vague lines of evidence" point, it is suggested, to the conclusion that "on both moral and intellectual sides the innate potentialities are richer, more various, and more specific than can be described in terms of degrees of intelligence and degrees of strength of the several instinctive impulses. Just as that peculiarity which enables a man to become a great mathematician (or a great musician) is certainly innate and hereditary, though we cannot define or conceive in what this hereditary basis consists, so also the development of the highest moral character only proceeds upon the basis of a hitherto undefined innate and hereditary peculiarity."

"This undefined innate basis of moral character is perhaps of all innate qualities the most valuable possession of any human stock. It is the innate basis of a quality which we may best name trustworthiness. This quality is no simple unit; it cannot be ascribed to the operation of any one instinct; and, though it implies intelligence, it is not closely correlated with high intelligence. In respect of this complex and vaguely defined quality, races and peoples seem to differ widely. Without its presence in a high degree, no people can achieve or sustain a high level of civilization" (p. 139).

The degree and nature of the correlation between this hypothetical 'trustworthiness' and intelligence is important not only theoretically but also practically, since experimental psychology enables us to measure intelligence with much greater accuracy and convenience than the moral qualities. Evidence from Professor Terman (*Intelligence of School Children*) and from Mr H. V. Race (*Journal of Educational Psychology*, 1918) is quoted in favour of the existence of a positive correlation. It is surprising that McDougall does not quote the at least equally definite evidence from the striking research of Dr E. Webb (*Character and Intelligence*, *Brit. J. of Psychology Monograph Supplements*, Vol. 1), which is particularly interesting in connection with the above quoted passage, as affording evidence both as to the existence and nature of the supposed moral quality of 'trustworthiness' (Webb's 'W') and as to the degree of its correlation with intelligence. As regards the former point, readers of this *Journal* will remember that Dr Webb claims to have shown the existence of a general character quality seeming to depend upon the degree of the 'persistence of motives'—a character quality which would appear to agree closely with McDougall's 'trustworthiness.' As regards the correlation of this quality with intelligence, we find that 'kindness on principle,' 'trustworthiness,' 'conscientiousness,' 'tendency to work with distant objects in view,' 'tendency not to desist from obstacles,' 'tendency not to desist from changeability' and 'mental work in usual studies' all correlate positively (though not very highly) with intelligence, the average correlation being about +.37; while qualities which would be opposed to trustworthiness, such as 'quick oscillation of feeling,' 'liability to extreme depression,' 'liability to extreme anger,' 'impulsive kindness,' and 'readiness to become angry,' correlate, the first two negatively, the others not at all, with intelligence (*op. cit.* p. 43). This evidence affords useful support of McDougall's contention of the existence and importance of 'trustworthiness' and of its positive correlation with intelligence; though it would appear that the degree of this correlation is not sufficient for it to be measured satisfactorily by means of intelligence tests.

In his final chapter (Chapter VI) McDougall returns to the consideration of the influence of innate racial qualities on national life. He maintains that under civilization racial qualities tend to deteriorate—*possibly* to some extent owing to the influence of reversion and the transmission of acquired characters, but *certainly* owing to the influence of reversed selection. The beneficial effects of Natural and Sexual selection are largely abolished by civilization and in their places we have the destruction of the most desirable members of the community by war and their relative sterilization as the result of the attraction of the best country stocks to the towns and of the operation of the social ladder. The latter mechanism, though of itself extremely useful as a means of utilizing for the benefit of the community individual ability in whatsoever social stratum it may appear, "tends to concentrate the valuable qualities of the



whole nation in the upper strata and to leave the lower strata depleted of the finer qualities."

"This provides the leadership and ability required for the flourishing of national life in all its departments, and in so far is good and beneficial. But the working of the social ladder has further and less satisfactory results. The upper strata, which contain in concentration the best qualities of the nation, and which are capable of producing a far larger proportion of men fitted for leadership than the lower strata, become relatively infertile. The causes are varied and complex, and in the main psychological: late marriage, celibacy, and restriction of the family after marriage are the main factors. This is not a new phenomenon or peculiar to any one or a few countries. It is a well-nigh universal phenomenon. Roughly, it may be said to be due to the outstripping of instinct by intelligence in these favoured classes; for instinct cares for the race; intelligence, save in its most enlightened forms, for the individual. It is not confined to the topmost stratum. It begins there and descends through the strata immediately below. In Britain it has reached the skilled artisan class, the pick of the wage-earning class, and is displayed acutely in that class. Meanwhile the lowest strata continue to breed at a more normal rate; the birth-rate remains highest among the actual mental defectives. The residue in the villages continue to be drained more completely of their best elements; the towns sift out the best endowed of these immigrants and pass them up the social scale to become sterilized by their success. The process tends to accelerate and accentuate itself as it continues. Thus, the increasing demands of a civilization of progressing complexity are for a time met by the operation of the social ladder. But it is a process which cannot continue indefinitely. There must come a time when the lower strata, drained of all their best strains, can no longer supply recruits who can effectively fill the gaps in the upper strata and serve as efficient leaders in all the arts and sciences of civilization. With increasing demands and diminishing supply, a point must be reached at which the supply falls short. That is the climax, the culminating point of the parabola of that people; when a people reaches that point, it stands at the height of its career, but it stands on the brink of the downward plunge of the curve" (pp. 158-160).

In this passage (which we have quoted in full because it so well conveys the gist of this portion of the argument) McDougall admits that we have here to do, not with any new sociological development or one that is confined to a few countries but with "a well-nigh universal phenomenon." This phenomenon is indeed only an aspect of Herbert Spencer's *Antagonism between Individuation and Genesis* (though McDougall's reference to Spencer in a foot-note fails to do justice to the latter's contribution to the subject). Since evolution, both at the human and infra-human stages, has thus manifestly gone on in spite of the universal tendency of more developed organisms to reproduce themselves less rapidly, it is clear that the relative infertility of the more able in modern civilized societies is not *necessarily* in itself fatal to progress; and this naturally gives rise to the question what are the *specific* circumstances, if any, that justify McDougall's gloomy prognosis in the present case. This problem is, in the opinion of the present reviewer, not envisaged with sufficient clearness, with the result that the strength of the argument at this point suffers somewhat in consequence.

The reason why a diminished fertility is often compatible with continued progress is, as Spencer has shown and as the writer of this review has recently



reiterated in the pages of this *Journal* ("On the Biological Basis of Sexual Repression," *Medical Section*, Vol. 1, p. 225), that the increased individual development correlated with this lessened fertility sometimes *pays biologically*, i.e. leads (through an increased survival rate) to an *increase* instead of a *decrease* of population. Before it can be shown that the lesser fertility of the more able strains constitutes a social danger, it must be shown that their lower birth-rate is not compensated by a lower death-rate, and this essential portion of his task is only attempted by McDougall in a somewhat inadequate and half-hearted manner. In common with many other writers on sociology, McDougall concentrates too much on birth-rates and he treats with relative neglect the equally important questions connected with death-rates. This is illustrated by the fallacy implied in the following sentence: "the fact of the greater increase of the poorer classes (or, more generally, the inverse correlation of fertility with good social status) is abundantly established" (p. 188). The casual reader might here be led to assume unthinkingly that there existed some necessary correspondence between fertility and increase, whereas of course (as McDougall himself is naturally well aware in his more guarded moments) it is impossible to infer anything of importance as to the rate of increase from a knowledge of the birth-rate only.

There is indeed a certain amount of evidence brought forward to show that the lower birth-rate of the upper classes is "only very partially compensated by a lower death-rate." Thus we are told (in a quotation from Popenoe's and Johnson's *Applied Eugenics*) that in Pittsburgh the correlation between illiteracy and net increase is  $+ .731$ ; but there is very little attempt made to show how general this phenomenon is, nor how far it applies to racial as well as to class differences, all-important as this is for McDougall's argument.

This deficiency is emphasized here, not because the present reviewer is inclined to disagree with McDougall's opinion that the lower birth-rate of the desirable strains is only partially compensated by a lower death-rate, but because it is disappointing to see a writer of McDougall's calibre tending to fall into the common error of confusing fertility with increase and because it is desirable to draw attention to the very real eugenic importance of the question of survival-rates. There is no doubt that a thorough statistical study along these lines would be of the greatest value. We must, however, content ourselves here to note in passing that the figures for London (1905-9, shown by the L.C.C. at the Japan-British Exhibition of 1910) agree with McDougall's contention in showing a survival rate of the 'richest' districts of 9.4 per thousand as against 15.8 per thousand for the 'poorest' districts; while, on the other hand, those for Paris in 1906 do not agree, since here the average rate of increase in the poor districts with birth-rates of 22 to 24 per thousand is no greater than that of the rich Elysée quarter with a birth-rate of only 11 per thousand (*Annuaire Statistique*, 1909, p. 429).

In so far as McDougall is right in this matter—and, so far as class differences go at any rate, he probably *is* right, though he has not taken the trouble to prove his position at all adequately—the cause of the greater increase of the less able is to be found very largely in the operation of the humanitarian sentiments and the effects of socialistic legislation. In a state of nature the more individuated but less fertile organisms are at liberty to derive the full advantage of their greater individuation, so that their diminished fertility may often be easily compensated by their greater aptitude for individual survival. In our present western societies, on the other hand, the more indi-

vidually developed and less fertile classes have to bear a double burden; they not only have to maintain themselves against their less individuated but more fertile competitors, but are compelled at the same time to contribute to the maintenance of a portion of these competitors. The dysgenic effects of this arrangement are sufficiently obvious and have often been pointed out by writers on eugenics. Socialistic tendencies in legislation often lead not only to a higher birth-rate and survival-rate among the relatively inefficient and undesirable members of the community than would otherwise exist (because they are to some extent supported at the expense of the more efficient) but also to a lower birth-rate among the more efficient classes (since here, as McDougall points out, the voluntary restriction of the birth-rate is largely determined by the desire not to fall below a certain standard of comfort, and the difficulties of maintaining this standard are increased when a portion of the available income is devoted to the maintenance of the poor). McDougall rightly insists that eugenic considerations such as these should be borne in mind in our evaluation of all social institutions, and there can be little doubt that the undue piling of burdens upon the abler classes of western communities is a factor of prime importance—possibly the most important factor—in the production of the lower rate of increase in these classes which McDougall deplores.

But even though we accept to the full McDougall's position with regard to the slower increase of the desirable elements in a community, there remains another point raised by his treatment which calls for some comment. In the passage quoted above from p. 160 we are told that, in spite of the relative infertility of the abler stocks and individuals, "the ability at the head of the nation may for a time keep pace with the increasing demands of civilization by means of the social ladder": that is, the poorer classes are for a time able to make good the losses incurred by the nation through the infertility of the richer classes; these latter classes are, through the working of the social ladder, constantly being recruited by the abler strains from the poorer classes; these strata, in their turn becoming "sterilized" by their success, are again replaced from below, and so on. Now it is contended by McDougall that "with increasing demands and diminishing supply a point must be reached at which the supply [of sufficiently able individuals] must fall short," and further that "it is highly probable that several of the great nations are approaching or have reached that point."

There are here, it would seem, three points of importance that are worthy of further consideration. In the first place, are all the demands made by civilization upon the individual really increasing as fast as McDougall seems to think? This itself is a big question which would be well worth detailed treatment at the hands of the sociologist. It is probable that the mechanical inventions of the last 150 years have in certain respects made our lives easier instead of more difficult; it is very possible, for instance, to carry on certain industrial occupations of an automatic character with a minimum of intelligence, and with the increasing perfection of mechanical apparatus the number of such occupations may be considerably increased. Even in the hard professions such as McDougall has specially in mind, medicine for instance (which is taken by him as an example), the increasing difficulties caused by the accumulation of scientific knowledge may to a large extent be counterbalanced by the tendency to increasing *specialization* of those who adopt these professions. The same holds true, to some extent, of the great tasks of organization in industry, commerce, war, etc.

Secondly, is the supply of sufficiently able individuals from the poorer classes necessarily diminishing? It is at any rate theoretically conceivable that, in virtue of the natural variability of the race (a variability that is probably increased as an indirect result of the modern facilities for travel) there will continue to be a sufficient number of able individuals produced from the poorer classes to fill up the places left vacant by the relatively low fertility of the rich. This is perhaps the more likely in view of the fact that under present conditions the absolute size of populations is constantly increasing in most western countries, so that there tends to be an ever enlarging field from which able individuals can be selected. This factor would of course only be of advantage if the necessary *proportion* of able individuals to the total population is tending to become smaller. McDougall would probably be inclined to deny this, but in view of the increasing specialization and mechanization of much of the world's work, such a *relatively* decreasing need of able individuals seems by no means impossible.

In the third place, even if we grant with McDougall that "there must come a time when the lower strata, drained of all their best strains, can no longer supply recruits who can effectively fill the gaps in the upper strata," it still remains to be proved that this time is approaching or has come. McDougall considers it 'highly probable' that this point has been reached, but the evidence in favour of this view is vague and insufficient, depending as it does chiefly upon the failure of the nations involved in the Great War to bring forth men adequate to their needs. It is interesting to note however that the Great War has been triumphantly claimed by others to have definitely disproved the supposed moral degeneracy of our race. Even if in this case (as seems probable) these latter persons are thinking rather of the rank and file while McDougall is thinking of leaders, the circumstances certainly appear to demand a more elaborate proof of his contention than is attempted by McDougall and do not seem to justify him in pouring scorn upon the "fatuously complacent utterances" of a writer in *The Times* who holds the contrary opinion that "we may have complete confidence in the capacity of the English stock to respond to all the needs of the future." Neither the one view nor the other is adequately proved at present; but in the absence of sufficient evidence on the question it is certainly wiser to admit the possible correctness of McDougall's gloomy outlook than to place one's faith too liberally in the more optimistic opinion of *The Times*. Indeed, we have raised all three of the last-mentioned points, not necessarily because we believe McDougall to be wrong but rather to emphasize the interest, importance and complexity of the questions at issue and to indicate the extreme desirability of collecting further evidence with reference to them.

Readers who follow McDougall's somewhat alarming train of thought to its conclusion, will be disappointed to learn that he does not regard the suggestion of possible remedies for the evils that he prophesies as part of his task in the present study, which aims only at directing the reader's attention to the significance and magnitude of the problem of eugenics and of the desirability of judging and evaluating "every wide measure of social legislation, every custom and social institution...with reference to its bearing on this problem." In spite of this, however, McDougall does offer certain practical suggestions, both in the introductory "Phantasy of a Foolish Philosopher" which we have already outlined and in an Appendix entitled "The New Plan." In view of the title of the Introduction and of the general disclaimer



that precedes the Appendix, it is difficult to criticize these practical suggestions, as they are apparently put forward in a casual and purely tentative manner without any claim whatsoever to exhaustiveness. A brief description of these suggestions and a few comments on them must, however, be inserted here in order to give some degree of completeness to this critical review.

The New Plan is based on the idea that the more desirable individuals might be encouraged to reproduce themselves more rapidly by guaranteeing a suitable increase of income for each additional child—this addition to bear some proportion ( $\frac{1}{10}$ , or rather more, of the earned income is suggested) to the financial resources already at the disposal of the parents. In this connection he refers to his "Practical Eugenic Suggestion" already published in *Sociological Papers*, Vol. II, 1909, in which he proposed that the State and the Municipalities, which employ a large number of selected servants, should introduce remuneration on this plan into their services. Furthermore, he reminds us that since his paper was written some small steps have already been taken in this direction, viz.: (1) the small remissions of income tax made by the British Government on account of children of persons of small incomes, and (2) the separation allowances paid to soldiers by the British and other governments during the war; in the British army these allowances were made larger in proportion to the number of children and to the rank and pay of the soldier, though, unfortunately, this scheme was not consistently applied to officers, thus indicating, as McDougall thinks (probably quite rightly), that there was no realization of its possible eugenic significance in the minds of those who framed or applied it.

McDougall recognizes difficulties in the way of supposing that the same plan might be universally or widely adopted by private employers or by bodies not supported by taxation. To meet these cases he suggests the creation of a national fund to be raised either by taxation or by private munificence or both, and proposes further that in the first instance such a scheme might be applied to one highly selected class, such as teachers in Colleges and Universities. It is unfortunate that he gives no further hints as to the financial aspects of this highly interesting "new plan."

It will be observed that both in this more practical Appendix and in the more fanciful Introduction McDougall's proposals follow the lines of Positive rather than of Negative Eugenics, thus departing considerably from the more recent tendencies of most British eugenists, who have of late laid more and more stress upon the negative aspects of Eugenics. It is this change of emphasis by McDougall that the present writer, in company perhaps with many other readers, feels most inclined to criticize, though aware that criticism is to some extent disarmed by McDougall's method of introducing his practical proposals. It is true that in one place there is a favourable reference to the employment of sterilization and institutional segregation as a means of dealing with "that eminently urgent evil, the high birth-rate of the admittedly and grossly unfit." But McDougall seems to hold out little hope for the eugenic application of the milder and far more generally utilizable method of birth-control. Thus, in reference to Professor Dunlap's hope that a further diffusion of knowledge concerning contraceptive methods will solve the "Negro Problem" of America, he says: "It is to be feared that it will have, among the coloured people, only the positively dysgenic effects which it already produces on so great a scale in the white population; that among both white and coloured people it will be put into practice only by the more far-sighted, prudent, and self-controlled;



while the most ignorant, careless, and improvident will continue to behave as they always have behaved" (p. 194).

Now it is of course true that in the past birth-control has tended to work dysgenically for the reasons indicated. But the champions of birth-control may legitimately reply that this method has seldom, if ever, been given a fair chance to act eugenically. This is indeed realized by McDougall himself—as when he very truly says that "in this all-important matter of birth-control the position of America is remarkably and uniquely disastrous. The educated classes seem to cultivate and practise the principles of birth-control more assiduously than any other class of persons of the civilized world, while, *mirabile dictu*, they maintain laws which forbid the extension of the knowledge of such principles to the mass of the people" (p. 163). It would seem that if this deplorable attitude (upon the psychological foundations of which the present writer has endeavoured to throw some light in the article in this *Journal* already referred to) could be altered, birth-control might well become the most powerful and at the same time the most simple, humane and inexpensive weapon in the whole eugenic armoury. If only our population could be induced to adopt the principle that no individual should bring into the world more children than he can reasonably hope to bring up healthily and happily, this would create a vast eugenic factor operating throughout the greater part of the social and economic scale. Assisted by sterilization or segregation of refractory individuals at the bottom of the scale and perhaps also by some such measure of positive eugenics as that advocated by McDougall at the top end of the scale (or perhaps only by an alleviation of the burdens imposed by socialistically-tending legislation), such a factor should soon bring about a tolerably near approach to the eugenic ideal, with the minimum of trouble, expense or interference with individual liberty.

That the outlook for the rational adoption of birth-control methods along these lines by the poorer and less intellectual members of society is by no means hopeless is indicated by the results of the propaganda meetings recently held by the Malthusian League in one of the poorer parts of London, where (as the writer can testify) great interest was shown as soon as the mists of ignorance and prejudice—largely the result of the selfishness and hypocrisy of the wealthier classes, combined (one must regretfully add) with the obstinacy and monoideism of the socialists—began to be removed. Some important evidence, moreover, that a change of attitude on this question would really bring about the results here claimed is provided by the example of Holland, the only country where Neo-Malthusianism has met with some degree of official approval—a country where the death-rate and infantile mortality has fallen more rapidly than with any other nation, where the physique of the population, as indicated by the examinations for military service, has amazingly improved (Dr Søren Hansen at the Eugenics Congress of 1912 actually asserted that the average stature of the Dutch people had increased by four inches within 50 years) and where there appears to be a marked absence of many of the disturbing social features at present to be found in most other parts of Europe. Under these circumstances it seems a pity that McDougall should not have accorded a more important place to rationally directed birth-control in his suggestions for eugenic reform.

This leads us to the last comment that we have to make before taking leave of this interesting book. In his apparent advocacy of positive eugenic measures unaccompanied by any simultaneous measures on the negative side, McDougall

seems to have overlooked the fact that the adoption of his scheme on a large scale would almost certainly give rise to an intensification of the struggle for existence. At the present moment most countries of the world are overpopulated in the sense that more children are being born than can be adequately fed (with the result that the death-rate in these countries is higher than would otherwise be the case). If there were brought about an increase in the birth-rate of the higher classes without a corresponding decline in that of the lower classes, there would be a still larger surplus of mouths over available food, so that the death-rate—already higher than it should be—would inevitably rise. It is true that this rise of the death-rate would be confined almost entirely to the poor, so that McDougall's eugenic scheme would be but little interfered with. But the eugenic improvement would be obtained at the cost of much additional human misery; a result which the most ardent enthusiast for positive eugenics would surely seek to avoid, if any means for such avoidance were available. Such a means is to be found, the reviewer would like to suggest, in the spread of birth-control among the poorer classes (and probably in nothing else).

There are many further interesting lines of thought that will occur to the reader on closing McDougall's little volume. We will only mention three of them without following them up:

(1) The relative infertility of the more cultured classes is, as McDougall himself points out (p. 195), largely the result of the desire for the good things of life that money can procure—good things, some of which would, under ordinary circumstances, have to be sacrificed in the event of more extensive parentage. How best can this anti-eugenic tendency be combated (apart from an increase of income for each child, such as McDougall suggests)? Possibly by a clearer realization of the 'decreasing returns' of pleasure so frequently obtained by each additional outlay upon luxuries and by a more thorough understanding of such truths as those brought forward not very long ago by Professor Urwick in his *Luxury and Waste of Life*.

(2) Does not the increasing difficulty of civilized life, as postulated by McDougall (supposing this to be at all generally true), itself militate against a more extensive parentage on the part of the intellectual members of the community? If the higher professions are such as can only be entered after a long and arduous period of study and apprenticeship, will this not necessarily tend to delay marriage and parenthood? If so, are there any means available for combating this tendency?

(3) Is not this difficulty specially grave in the case of women, with whom the physiological strain of frequent childbirth and the cares of motherhood on a large scale will in most cases be incompatible with the devotion to study, of sufficient time and energy, to enable them to enter the higher walks of life? If so, should we discourage women from entering the higher professions and sacrifice such social advantages as may accrue therefrom—as the positive eugenists would rather seem to imply (in McDougall's *Eugenics* it is thought desirable that each couple should have from five to ten children)? Or should we be content with a relatively small number of children from such women and rely more upon negative eugenics for our racial improvement (which seems to be the only eugenic alternative)?

It must be mentioned in conclusion that the book contains several appendices in addition to that to which we have specifically referred. Appendix I contains three interesting portraits intended as a "commentary on the pro-

position that all men are born with equal capacities for moral and intellectual development." Appendix II is on "Birth-Rate and the Social Strata" (this we have dealt with incidentally in the course of our review), and Appendix III expounds "The New Plan," as already indicated. Appendix IV is a plea for the registration of family histories and (perhaps as an encouragement to this end), Appendix V a pretty picture of the author's own children. Appendix VI gives a short list of books upon Eugenics—all those mentioned being published in America.

Finally, we can only recommend all those who are interested in the future of the human race to study this eminently suggestive and readable book and to ponder over for themselves the vastly important problems to which it so strikingly and eloquently draws attention.

J. C. FLÜGEL.

## REVIEWS.

*The Technique of Psycho-Analysis.* By DAVID FORSYTH, M.D., D.Sc., F.R.C.P.  
London: Kegan, Paul, Ltd., 1922. Pp. 133. Price 5s.

This excellently written small book comes as a refreshing surprise to anyone who has had to handle the type of manual on psycho-analysis which has become so common. The pernicious nonsense contained in some of them on the subject of technique is perhaps the most distressing thing about them; for theory or disbelief hurts no one, but the technique of any curative treatment is a serious matter. Dr Forsyth's small volume, however, is a great contrast to these and will consequently be of real value to the many who are seriously endeavouring to fit themselves to practise this method. Their number and the absence of any adequate means of instruction would alone deservedly ensure it great success; those who know little or nothing about the matter will find in it broad general outlines and many details that will no doubt set them on the right path. It must be said, however, that when they have won their own experience by other paths—by being analysed, analysing others, and becoming imbued with the theory and principles laid down by the initiator of this work—we think they will regard some of the views it expresses with surprise.

There is one striking omission which gives a somewhat false perspective to the book as a whole, and this is the absence of any specific mention in it of the 'fundamental rule' of the method. It is in fact alluded to once incidentally, as the rule that "the patient is to speak everything that comes to his mind." But it is not honoured with a bare statement in plain terms on its own account. 'Free association' too is only mentioned in passing in connection with dream-analysis, where "it is assumed that the reader is familiar with what is meant by it." He may be familiar with the meaning of the phrase; but it would be ascribing advanced experience to the beginner to assume that he is familiar with the importance of it in the work. In analytic treatment the rule is the one and only, but an absolutely necessary, prescription to be given to the patient. Upon the degree to which he adheres to it and upon nothing else depends the success of the treatment; the whole problem of resistance (and therefore, of analysis) is bound up with it. But from reading this book one would not imagine that this rule was anything of fundamental importance. This attitude of the author's is most plainly seen in regard to the opening of the treatment and is in the sharpest contrast with Freud's own view in this matter. In Freud's paper dealing with this<sup>1</sup> we find an example of the kind of opening words the analyst should address to the patient before he begins to speak. They deal entirely with this rule and occupy a full page of a large book. A comparison of this with Dr Forsyth's suggestion for the same occasion will illustrate the point. We can only conclude that this is one of Freud's 'discoveries and theoretical conceptions' which have been found 'difficult of acceptance' by the author; it is perhaps the reason why he advises the beginner "to keep an open mind and test the validity of Freud's work." If, however, the beginner does indeed adhere to 'practical observations on patients,' as

<sup>1</sup> *Sammlung Kl. Schriften*, IVte Folge, S. 428.



Dr Forsyth recommends, we believe that the result will only be an ever-deepening realisation in him of the supreme importance of this rule; he will discover that it contains the essence and whole secret of analytic treatment and that all other prescriptions are merely accessory to it—indeed, it may be said that the *depth* of this appreciation is a mark distinguishing the expert from the inexpert analyst.

It is not surprising that we find a corresponding absence in the book of any mention of the 'rule for the analyst'—the counterpart to the rule for the patient. In a most important passage<sup>1</sup> Freud expounds the way in which the analyst is to employ his instrument—his mind, memory and knowledge—in the work by making use of his own unconscious. But although nearly every other paragraph in this one essay is quoted by the author of this book, he has ignored this essential point which, as Freud says, represents the *aim* of all the minor prescriptions, gives the key to the analyst's attitude, and explains the necessity for his being himself free from inhibitions.

The absence of any reference to the underlying basis on which the technique is constructed affects the whole book and makes much that the author has to say appear didactic and not clearly worked out. This applies particularly to the section on the analyst, in which great insistence is laid on the important part played by the 'personality' of the analyst, though it is by no means clear what this means. We are told that "the analyst's first duty is to be passive," that "it is for the analyst never to allow his feelings to be played on," that "his own feelings must not become involved," and that "the personality of the analyst is to be kept altogether apart from the treatment"; there even seems to be a contradiction here, for we read that "some personal traits are of help and others stand in the way," while the analyst must learn "how to employ his personality with each case that comes before him." We are told most explicitly too that no social relations between physician and patient are permissible during the treatment; but no reason is given for these injunctions. One passage plainly shows the want of clearness in the author's mind on this point; for he says "the fact that the analyst keeps his personality in the background is only likely to provoke the patient's curiosity...to lead him to seize upon every casual remark or action"...and "these side-winds...impede rather than expedite the analysis." There is no explanation of why the analyst must take up an attitude which has this effect. The fact is that it does not actually have this effect, if the function of the transference and resistances is properly understood.

Again, although a passive attitude is laid down as correct early in the book there is much in it which controverts the statement. Numerous passages are written on the assumption that the analyst can actively control the course of the treatment. For instance, we are told that the beginner cannot "go very deep" into his cases and that he should "carry on superficially with two or three cases," while "working hard" at another. We think that any beginner proceeding on such an assumption will not merely learn very little, but will have a great deal to *unlearn* if he should ever hope to go deep into a case. We are expressly told that an analysis can be conducted "by short cuts and abridgements" (although this is advised against except after long experience); also that "deeper analysis is work for more experienced hands." A treatment conducted by 'short cuts' is not analysis: it implies an active management

<sup>1</sup> *Idem*, S. 405.

of its course which is fundamentally incompatible with it. As a practical experiment it may be advisable on occasion to combine two kinds of technique, but it should have been made clear that any such treatment is working by a mechanism which is the opposite of analysis, however much use may be made of analytic knowledge. As regards the advice to beginners not to go in for 'deeper analysis,' how is it possible for the analyst to ordain whether the analysis will be deep or shallow, whether the patient will reproduce his infantile attitudes or not? This of course depends entirely on what is in the patient's mind and is completely independent of the analyst's will. Nor do we understand how an analyst can 'work hard' at or 'practice and experiment' on a case. He may not know what the associations mean, and if so, he can only wait until the meaning becomes clear to him later; and he may make mistakes and learn from them. These are passive attitudes—a phrase which, incidentally, means 'passive to the analysis,' which is something much deeper and subtler than 'passive to the patient.'

In regard to the transference, too, there appears to be some confusion of ideas. The transference has two functions, or rather, it is (1) a phenomenon, which (2) has a function in the treatment. In so far as it is a phenomenon, *i.e.* the re-animation of the infantile conflicts and fixations in regard to the analyst, the author comprehends it completely and gives it its full due. The phenomenon, however, is not the same thing as its function; but he says, "once these emotions appear in the transference they are thereby permanently severed from their out-of-date attachments, which then lose their emotional value"; he even describes the 'working off' or 'abreaction' of energy as in itself affecting the cure. We should have expected that by this time the word 'abreaction' would have led an analyst to suspect that he had not 'gone very deep.' If this were the function of the transference how would analysis differ from any other treatment in which transference to the physician manifests itself? This confusion between the phenomenon and the function is exactly what Freud has dissipated in evolving the analytic method out of the old 'abreaction method.' His essay on the struggle which goes on during analysis between the *recollection* and *repetition* of infantile conflicts illustrates this differentiation very clearly. The 'repetition' serves no purpose; when the author says that the patient is to be given 'every encouragement' in 'working off' the accumulated nervous energy we can only point out that this is not analysis. Again, he says that an analysis is an emotional experience and not a scientific enquiry; whereas, on the contrary, the patient wants to make it an emotional experience, while the analyst must perpetually remind him that it is a scientific enquiry.

The author has not ignored the real function of the transference, *i.e.* the additional incentive to overcome his resistances which the patient derives from it; but its importance appears to be under-estimated, and we surmise that this is not unconnected with the great insistence elsewhere laid on the necessity for the analyst to keep himself 'apart from the treatment.' The true reason why this attitude should be adopted is that the patient's feelings may reflect as little as possible of anything real; nothing is done to stimulate them, so that they develop as a 'pure culture,' showing in isolation the original form and subsequent development of his love-impulses. This attitude does indeed 'provoke resistances,' as the author truly says, because the transference is always first employed by the patient as a resistance; it has none the less a successful result; an unconscious impulse has been provoked to display itself

in a pure and quite individual form. We may here point out that the author has misread Freud's passage about the analyst communicating to the patient something of his own life. Freud says that, although it would seem natural to do so, it has the effect of encouraging the patient in his tendency to turn the analysis on to the physician. The same objection applies to the author's statement that, when a patient expresses his "inability to continue without an explicit assurance of the sympathy and esteem of the physician, this difficulty should never be allowed to remain." To give such an assurance is to vacate the position of analyst, whose judgments are necessary, but whose feelings and opinions are always irrelevant.

Other points which suggest a lack of reliance on the function of the transference are the over-estimation of intelligence in patients—frequently a cause of great opposition to adherence to the rule, since this requires that all the critical objections of reason shall be ignored; the under-estimation of professional authority, which is the same here as in any other work—it is merely used in a different way; and the emphasis laid on the difficulties presented by 'negative' and 'narcissistic' types. Apart from their appearance in psychotics, these characteristics are secondary and nearly always analysable; nothing is more likely to bring them to the surface, however, than any failure in the analyst to trust the power of the unconscious impulses and to make use of them. Incidentally, it may be said that the word 'narcissistic' is used much too loosely by analysts. It is rarely understood, for a great deal of work on the subject remains to be done; at present it is used as a handy label to apply to failures. The obsessional neurosis too is far from being as peculiarly inaccessible to analysis as the author suggests; on the contrary, through psycho-analytic research it has become more comprehensible than hysteria. Resistances seem altogether to be regarded too much as 'impediments'; the author's dissatisfaction when they arise is expressed quite explicitly. He gives numerous instances of the ways in which they are roused—by curiosity, jealousy, dislike of paying fees, even by the surging into consciousness of the erotic transference—and he frequently refers to them as causing regrettable loss of time. Yet the part played by these emotions in the patient's mental life is exactly what he needs to learn. How can he recognise something which never appears? As Freud says, we are dissatisfied only if we cannot succeed in bringing the resistances to the surface. Any anxiety to hasten the patient's recovery often makes the resistances insurmountable; he can then make use of them to gratify the transferred unconscious wish to disappoint the parents—a reproduction instead of a recollection.

There is one peculiarity in the book which needs mention. It seems connected with the assumption that the analyst can control the course of the analysis, and it is in striking, though significant, contrast to the repudiation of professional authority. It consists in implications that the analyst requires to exercise some aggressivity at times—in references to 'hurting the patient' and to 'the use of force,' to explanations being given 'with a steel fist,' or with 'violence short and sharp,' and to cases needing 'to be ended, if necessary, with some violence.' Apart from what is known as 'active technique'—*i.e.* prescriptions affecting the patient's life outside the treatment, designed to cut off substitutive gratifications of libido and intensify the conflict for purposes of analysis—when active measures are necessary, all that is required is the kind and quiet firmness of the best professional traditions.

One essential pre-requisite for the analyst is patience. The passivity of his

task is explained by the fact that, as Freud says, he merely sets in motion a process which then continues according to its own laws. Active intervention in the process can only spoil its progress and can never hasten it. Anxiety for the patient's recovery is a medical attitude, not a scientific one, and it vitiates analytic work; recovery is a secondary, accessory result of the scientific work to be done. The attitude of investigation alone gives the key to all the injunctions laid down for the analyst and makes it possible for him to adhere to them. When he possesses it, it follows that his own feelings do not become involved; no question of impatience or of hurting his patients will arise. A profound acceptance of determinism will alone ensure him the indifference, the patience, and the kindness necessary for the work.

JOAN RIVIERE.

"A Study of Psychological Types." By BEATRICE HINKLE, M.D. *Psychoanalytic Review*, April, 1922.

The *Psychoanalytic Review* for April contains a long and important article on Psychological Types, by Dr Beatrice Hinkle, a well-known American analyst of many years' standing. She states that very early in her psychoanalytical practice she noted that patients showed such marked differences in their reactions to their life problems, that they appeared to fall into completely different categories. At this time she came in contact with Jung's first brief contribution on the subject<sup>1</sup> which at once shed light on her own observations, and proved a stimulus to further work. Using Jung's introverted and extraverted types as a starting-point she soon came to realise, as he also did, that many sub-types were included in the original definitions. When, after many years' independent work, these two observers met again in Europe, both had formulated very definitely several different types. Jung's important work *Psychologische Typen* was published in Zürich in 1921, and Dr Hinkle's contribution now appears in print for the first time.

Dr Jung describes eight types, according to the predominant function used for adaptation, each type having an introverted or extraverted mechanism. He further delineates them from the standpoint of the conscious and unconscious. Dr Hinkle describes six types and covers the same ground. She calls them *Simple* introverts and extraverts; *Objective* introverts and extraverts, and *Subjective* introverts and extraverts. Jung's intuitive type is not regarded as a type in itself, because intuitive characteristics belong equally to introverts and extraverts, relating in the one chiefly to thought and the unconscious and in the other mainly to feeling and external life. The special intuitive mechanisms are most characteristically seen in the two subjective types.

The "simple" introvert and extravert types are described first in this monograph. We are already familiar with them from Jung's earliest description. The simple types react in an almost prescribed way, according to the main direction of their libido currents. The extravert turns most readily to the external world, and has a definite tendency to lose his individuality in it. He has a feeling relation with the object, so that he is able to handle it directly; whereas the simple introvert reaches it only secondarily, apprehending it first by his thought, and hence his reaction is delayed and uncertain,

<sup>1</sup> See *Collected Papers on Analytical Psychology*, Chapter XI.



because it is influenced by the personal quality of his feeling. The introvert's feelings are closely related to his ego, and he is self-aware, and self-conscious. The inadequacy produced by his sensitiveness in attacking the external world results in a feeling of inferiority, which gives a peculiar emotional tone to his reactions. Dr Hinkle points out that "*The feminine principle can be said to dominate this type*, on account of the inward flowing movement of libido, which finds its object in the inner subjective self-created world, as opposed to the demands of the outer external reality." It is in this type that Adler's "masculine protest" prevails, for the over-bearing, power-loving, and excessively masculine pose is in these people an over-compensation for their sense of inferiority and psychological femininity. The extravert, on the other hand, more apt in his dealings with the external world, courts and pays tribute to it, and is typically "*the representation of the masculine principle*." He gains satisfaction for his power mechanism by establishing himself in his institutions in the outside world, and is little inclined to impose his personality. He attacks the world with action in contradistinction to the introvert's attack by thought.

The introvert and extravert types rarely exist in their pure state. Many persons diverge very markedly, according to whether their objective or subjective tendencies predominate. Should persons be "well adapted" differences in type are not always obvious, on account of the compensation that has arisen through training or effort. Where there is a failure in adaptation, however, or where type is very much accentuated, differences in the character of reactions at once become very marked.

We will follow Dr Hinkle's classification further. Of the Objective Types she says their chief characteristics "consist in an attitude of mind which seems to reduce all things to their simplest forms, and preclude all complexities and subtleties.... Things must be defined in terms of their qualities, and exclusively determined by the concrete sense perceptions, and nothing which cannot be measured or weighed has any real meaning for their minds."

The objective types approximate Dr Jung's Sensation Type, only here, as elsewhere, he divides persons according to their functions of thought, feeling, sensation, or intuition, whereas Dr Hinkle presents the *type of personality* produced. Wordsworth has given us a simple but comprehensive picture of objective types:

A primrose by the river's brim  
A yellow primrose was to him,  
And it was nothing more.

In such persons sensations replace symbols, and imagination is completely discounted. A patient is quoted as saying "I never knew that there could be anything more delightful than a warm bath, or the taste of coffee and cream." All that is not obvious and demonstrable is missed. They are "psychologically unawakened," and if circumstances or analysis push them to a fresh view of life, they are confronted as it were by a blank wall, or an empty space.

Political life seems to produce objective-mindedness, for though Dr Hinkle describes the English psychology as extraverted, and the German psychology as typically introverted, one cannot but see that the necessity to be concrete in public affairs pushes national psychology far into a soulless objectivity.

Dr Hinkle's most penetrating and delicate observations have been made upon the Subjective Types, *which she emphasizes as being bi-sexual*. That these types lend themselves to detailed observations is natural, because this very quality of bi-sexuality, and their necessity to live in the dual world of the

objective and subjective, plunges them into perpetual conflict. These types, too, appreciate especially the assistance that analysis can give them. They are already aware of their inner life, and its importance, as well as the weight it exercises upon them; and they need above all to understand the compulsions of the two worlds under whose laws they more or less unconsciously labour. It is this duality that led Dr Jung to describe his types so exhaustively from the different standpoints of the conscious and unconscious. In Dr Hinkle's delineation it will be seen as before, that she pictures the different types of personality that arise; and we can fit one person after another into her series.

The bi-sexual types, whether introverted or extraverted, "share in common a kind of androgynism." There are boys who are called by girls' names, and girls who are dubbed "tom-boys." Each possesses in marked degree so-called male and female tendencies, and each tends at all times to *function as male or female, under the symbols of boy or girl, or father or mother.*

Subjective types are highly endowed with intuition, which permits them easily to function as if they were what the symbol represents. All these people are "tender-minded" (Wm James), all have a tendency to depreciate the world of external reality in favour of their subjective creations. These types are essentially creative, and this is the result of their bi-sexual disposition. They fecundate themselves. Artists, one and all, belong here; either on the extraverted or introverted side. The dangers for these types, and they are exceedingly numerous, lie in the instability that such intuitive, or symbolically orientated adaptations produce. They are unstable on account of their protean transformations. Seize them and they change into something else. Fix them to reality, even their own (as you think), or to yours; they abjure both in equal degree. They are vehement in their protestations that the world would make slaves of them. Seductive, alluring, lovable, they represent the acme of desire to those who are all too rational; but embrace them, and a phantom struggles in your grasp. You see them as exquisitely feminine,—handle them and they are thorny males; rely on them as men—and you realise them as elusive feminine. They are the embodiment of the pairs of opposites.

To understand the peculiar quality of their bi-sexuality we must accept "the world" as their symbol of reality, *i.e.* of their *male* reality; and all that concerns their "creations" as the child, which is the symbol of woman's reality. If this seems at first arbitrary to our usual objective understanding of things, let us follow Dr Hinkle's idea of the creative artist still further, and ourselves place his creations under the symbol of the child. The truth of the idea will thereupon dawn on us. There are no purely scientific terms for describing certain forms of psychic reality. Psychic reality belongs to another set of facts which can only be subsumed in the form of symbols, because of its inherently mystical character. Who deals with the unconscious, deals with the mystical mind. Dr Hinkle claims that the family is the collective prototype of the individual. Man is a fourfold being, who functions under the symbols of father, mother, son and daughter, either co-incidentally or successively. Usually he functions under one symbol in the objective world, and another in the subjective realm. In the subjective types this revolving mechanism is always capable of dissection. The mother presents us with several cases, worked out schematically by means of this idea, which indeed appears to be full of possibilities for fresh understanding.

Let us examine an ideal case on the basis of the family, and see how the

mechanisms work *in vacuo* as it were, reminding ourselves of Goethe's Homunculus. "Thus we come to the four symbols under which all humanity functions, and which can be said to symbolise actual aspects of the personality in its development, and through which four phases all humanity normally passes."

We will take as our example a timid sensitive man. He is fixed by his sex into his biological form, though essentially feminine in character. In childhood and youth he was afraid of his father, and was actually antagonistic, because he saw in him one who personified and constantly beckoned him to his own manhood. Hence he remains in thought and feeling with his mother, and places her, instead of his father, as authority over him. But of course the father and mother form his milieu, and are his symbols of objective reality. When he goes over to his subjectivity (*i.e.* his infantile unconscious character) he lives his symbols. To escape the son's real relation to his father he therefore functions under the symbol of the daughter, that is he acts to his father as a daughter would act. He reacts to an *imago* which may, but generally does not in the least coincide with reality. Dr Hinkle says "I have defined the meaning of the symbol of the parents as the aspect of the psyche which is orientated to the external world," because the parents deal with reality.

The necessity to play a rôle arises from time to time in each individual in his wish to escape from the domination of internal and external necessity. The timid and sensitive man whom we have taken as our example, now marries. He has grown up, however, without changing his psychology. Formerly he replaced his father by his mother, now he replaces him by his wife, because she represents external reality, and he functions under the symbol of the son. But as he is not a son, this posing brings about an unbearable situation, which can only be maintained by greater and greater repression, because now he is married a new demand is made by the world upon his manhood. On account of the sense of inferiority inherent in the situation, the man is forced to make a move in one of two directions. Either he must rise to reality, and take his position as husband, under the father symbol, which is his proper place; or else he must re-inforce himself in his subjective attitude, and returning to the original identification with the daughter-rôle, which in reality he had never truly abandoned, remain infantile feminine, always subject to the mother-spouse. The struggle to establish himself in his manhood is Jung's battle with the "Terrible Mother," whose aspect, as we know, only becomes terrible because it is the result of the tragic dependence of the son upon her.

There is nothing in the example cited that is peculiar to the subjective types. What is noteworthy is that their special dose of bi-sexuality involves them in more frequent conflicts, and their marked sensitivity makes them relatively powerless to escape from the dilemma of their psychology. But Dr Hinkle has shown us how differently the introverted and extraverted members of these types react in similar situations in life.

The subjective introvert never deals with the world as it is, but with the images or symbols he creates of that world. He never sees the external object direct, but as *imaged* object. This brings about the worst possible misunderstandings in his human relations. The object to him is a distraction and a snare. Because of his fear of it he is forced to fix it unchangeably, within himself, and orientate himself to the idea he has formed of it. Thus he lives by principles and not by love; since love as he understands it establishes the object in power over him. The object loved appears to have magical qualities which lead to illusion, for he is under its spell. In his desire to destroy its influence,

he strikes it down, or wounds it, to show his domination over it; and with eyes still fixed on the unchanging image of the beloved, who is in fact a symbol or ideal of the actual beloved, he does not see what havoc he has worked, or realise the cruelty he has done.

Things are quite otherwise with the subjective extravert. He is not afraid of objects, he needs them, and adapts himself with thoughtless facility to a succession of them. Unafraid of love, he seeks and spends it everywhere. He gains his power not by domination or destruction of the object, but by establishing his many objects everywhere. He can pass from one object of love to another, without altering his intrinsic appreciation of them, wounding by his changeability but never establishing his power through hate.

There is much in this valuable monograph that I cannot even touch upon within the limits of this Review. It will however be recognised that the question of the incest problem is elaborately handled under this scheme, none the less that the author rejects the idea of concrete incest wishes (even though unconscious). A full complement of mischief however is ascribed to the same mechanism, although its symbolic significance is exclusively adhered to.

We understand that this article is a section from a book that is in course of writing. Those who read it with the care it deserves will look eagerly for more from the same author.

CONSTANCE E. LONG.

*An Introduction to Psychology.* By SUSAN S. BRIERLEY, M.A. London: Methuen and Co., 1921. Pp. vii + 152. Price 5s. net.

Writing "to meet the first needs of non-professional students of psychology," the author has sought, with considerable success, "to present a consistent point of view with regard to some of the outstanding controversies which tend to bewilder the beginning student" (p. v). The point of view is that of a convinced Freudian who, recognising the absurdity of the claim of the 'new psychology' to be the whole of psychology, describes psychoanalysis as a "highly specialised field of research...not yet...entirely in focus with the general body of psychological doctrine" (p. 40). Possibly, were it entirely in focus, the highly specialised branch would occupy much less space in 'an introduction to psychology'; but then we should have a different point of view and, possibly, for the present time, a much less interesting exposition; for the student who has passed beyond the stage of bewilderment will recognise in the work a hand held out from the Freudian side across the gap that may yet develop into a chasm separating psychoanalysis from psychology.

The 'consistent point of view' is, perhaps necessarily, a one-sided view, but the reader is warned that "he will only be able to find his own allegiances when he has a fuller acquaintance with the detailed facts and methods involved" (p. 10); and if he turn for guidance for further reading to the "Suggestions" (p. 148) and select therefrom Watson on 'Behaviour,' and Ward on 'Psychology,' he will doubtless soon realise that other points of view can be argued with at least equal force and that, after all, psychology is not a field of knowledge that can be assimilated readily in odd moments on the Underground.

The book is divided into two parts: Part I on 'Scope and Method,' Part II on 'Some General Problems.' Considering the second first, we find that it



commences with 'The "Wish"' and ends with the Freudian view of the 'Unconscious,' closing with a temperate defence of Freudian faith as to "the content of the unconscious." This defence hinges upon "two very important considerations": (1) "the word 'sexual' is not used by the Freudians in the everyday conventional sense," (2) "it is not possible in theory, or in fact, to make an absolute distinction between the *horme* and the *libido*, between the group of instincts labelled 'self-preservative' and those referred to as 'sexual'" (pp. 145-6).

Between the opening and closing chapters of Part II we have, in chapters v-viii, an excellent summary of the findings of experimental, physiological and comparative psychology viewed from the 'biological outlook' (p. v) of McDougall's *Social Psychology*. In ch. v, 'Organism and Environment,' is an account of the evolution of inherited and acquired dispositions in the race and individual and then, "the comparative point of view" having been duly emphasised, we "turn our attention chiefly to human behaviour and the human mind" (p. 79). In ch. vi we are led to view "instinct as a unity of perception, feeling and impulse" (p. 92), and in chs. vii and viii "to consider the processes by which instinct is transformed into knowledge and will and personality, under the hammer of experience" (p. 96): ch. vii dealing with the development of thought from the image, and ch. viii the development of the sentiments and will. The conclusion is reached that "'The will' is made of the same stuff as are the primitive impulses. It is those primitive impulses organised into larger mental systems, which bear in their inner structure the impress of experience, the results of memory, imagination and thought" (p. 125).

These three chapters bear the general heading, 'Instinct and Intelligence,' and are described in conclusion as a "brief sketch of the work of the intelligence upon instinct" (p. 125), but we seem to be faced with a difficult task when we seek, through the eyes of our author, to view more closely this wonder-working 'intelligence.' The index helps but little, for the only reference is to an account of intelligence tests introduced by the statement, "Intelligence is obviously a very complex quality, many-sided in its expression. We know roughly what we mean by the term..." (p. 24). Further, we find that except for the headlines, the statement that "intelligence [has] been developed in the service of the instincts" (p. 108) and the last paragraph, as quoted, the word intelligence does not occur in these three chapters. What then is intelligence for our author? Comparing the above-given quotations from pp. 96 and 125 (two) it would seem that "the hammer of experience," "the work of intelligence" and "the results of memory, the imagination and thought" are one and the same. Now, if memory is available only as image and thought is but an evolution from the image (ch. vii) the problem of the evolution of reason, sentiment and will is the problem of the image, and the crux the first 'free idea'—a conclusion we would commend to the careful consideration of quasi-behaviourists.

A slip that seems to call for correction appears on p. 114, where the introduction of the term *sentiment* is ascribed to McDougall, instead of to Shand.

Turning next to Part I, we find 'Fields of Enquiry' (ch. iii) given as *normal human psychology* (or general psychology), *genetic psychology*, *comparative psychology*, *social psychology*—the distinction between which and general psychology is "largely a matter of emphasis" (p. 35)—and *individual psychology*, which "is a point of view rather than a department" (p. 36). To these are added "the more practical aspects of psychology," which the author prefers to call *practical psychology* rather than *applied psychology* (pp. 36-7) and classifies as

the psychology of (1) education, (2) industry and (3) legal problems, (4) medical psychology and (5) psychoanalysis. The separation of psychoanalysis from medical psychology is made on the ground that medical psychology is abnormal psychology and "it is no longer true that [psychoanalysis] is mainly concerned with the abnormal" (p. 41), while its inclusion as a separate field of practical psychology is defended, somewhat apologetically, in the words: "Properly speaking the term should be used to refer to a method, but commonly it is also applied to a conception of human nature" (p. 40). We are inclined to think that in so far as psychoanalysis is practical or applied psychology it is, and should remain, medical psychology, that in so far as it is a method it is neither more nor less than the important method of general psychology commonly known as the method of 'free association,' and that in so far as it is neither practical psychology nor method it is theory, which may, or may not, be the best explanation of observed phenomena.

Under 'Methods' (ch. 11) are considered "the larger standpoints of technique" (p. 11). Three types of method—introspection, the study of behaviour and the study of mental products or "the products of the activities of living creatures" (p. 13)—are recognised, and the way in which "'observation' and 'experiment'" are used in experimental psychology is illustrated.

The first chapter is devoted to 'Definitions.' We recognise that a Freudian is necessarily a determinist but are a little surprised to find our author persuaded that she is a behaviourist: that "perhaps the most useful definition of psychology from which to begin is 'the study of behaviour'" (p. 2). We had thought that a better definition of Freudian psychology is "the study of the unconscious," but apparently our author was a psychologist before she became a Freudian and regards McDougall as second only to Freud (p. 110). Her behaviourism is a qualified behaviourism—what we venture to call a quasi-behaviourism. Watson and his school are given short shrift. They "take up a position radically different from that of McDougall, and in fact of most psychologists" (p. 9). "They give us not merely a 'psychology without a soul,' but a psychology without consciousness...and any really adequate psychology must find room both for the facts of behaviour and those of consciousness" (p. 10). We turn to the treatment of the definition 'study of consciousness' and find it rejected as insufficient. "The facts of consciousness by themselves are insufficient for the purposes of science...we are compelled to take into consideration many facts which lie outside the circle of consciousness, for the sequence of conscious experience is frequently influenced by unconscious processes of one kind or another" (p. 3). Postponing criticism; if 'unconscious processes' give the *how*, explanatory of the *what* of 'the sequence of conscious experience,' the easiest path to a definition is back from the 'study of consciousness' to the earlier 'study of mind.' Hence we are not surprised to find that the discussion of 'psychology as the study of mind' opens with: "This view is widely accepted and of considerable value." But *mind* presents a difficulty. It must not be regarded as "some mysterious independent entity distinct from 'body.'" To secure this, mind is defined as "the sum-total of the mental processes occurring in the life-time of the individual." This seems to help but little if *mental* means *of the mind*, and proves to be but a preliminary definition to introduce McDougall's definition: "the mind of an organism is the sum of the enduring conditions of its purposive activities." From *activities* to *behaviour* is an easy step, and we are brought to the position that "it is largely indifferent whether we define psychology as the science of behaviour, or of mind" (p. 8). This is

a somewhat startling conclusion but, nevertheless, is, in all probability, a correct one if behaviour is bodily movement and mind potential bodily movement.

Left the choice between *behaviour* and *mind*, our author chooses behaviour and, following McDougall, interprets behaviour as "purposive activity." Still this view of behaviour is accepted only "as a useful working attitude," for "it is more than probable that the distinction between 'mechanical' action and 'purposive' activity is not final and absolute" (p. 7). The meaning of 'purposive activity' is elucidated by a long quotation from McDougall<sup>1</sup>, the argument of which hinges upon the difference between a billiard ball and a *live* guinea-pig. That difference, put bluntly, is *life*. We think of Ward's summary of the historical record of definitions of psychology—"the fundamental concept of the first period was *Life*, that of the second, *Mind*, that of the third is *Experience*"<sup>2</sup>—and wonder if quasi-behaviourism is, after all, a regression.

Returning to the opening chapter of Part II, we find that the first section of the discussion of 'the "Wish"' is devoted to the consideration of 'Life Energy.' From amongst the many modern names for this 'Vital Force,' the author selects *horme* as best for general purposes and shows that the *wish* of the psychoanalyst is *horme* "with particular reference to human behaviour" and "essentially the same as the 'disposition' of other psychologists" (pp. 52-3).

With various important statements—as for example "that the whole concept of attention will be discarded by psychologists in the near future" (p. 55)—we find ourselves in disagreement, and, sometimes—as on reading: "it is one of the fundamental laws of behaviour that responses, negative or positive, are conditioned by the painful or pleasurable character of the result of *those* responses" (p. 65, italics ours)—we have felt that the real meaning of the author is not quite clear or is even misrepresented. We recognise, however, that these things are inevitable in so contentious a field in a short work probably compiled, in less than half the time the author would fain have spent on its preparation, under pressure from publishers anxious to meet the demands of 'non-professional students of psychology.'

The author rejects 'the study of consciousness' as a definition of psychology on the ground that it excludes 'unconscious processes,' and after arriving with McDougall and Shand at "the final and most complex level of integration of the personality" and agreeing that "we could very well fit ourselves [our friends and acquaintances] into the psychological scheme just outlined" (pp. 125-6) adds a chapter on 'the conscious and the unconscious' in which we are given an explanation of slips, forgettings and neurotic symptoms, in terms of the Freudian 'unconscious mechanisms.' Possibly this over-emphasis of the importance of 'unconscious processes' in an introduction to psychology is due partly to misconceptions that have sprung up around the theory of the unconscious. Freud has shown the great value of the concept 'the unconscious' in medical psychology, but the concept was not new to psychology when Freud first wrote. Höffding, writing more than thirty years ago has exactly the same title as our author, 'The Conscious and the Unconscious,' to one of his chapters. In it he reminds us that Carpenter and J. S. Mill wrote on 'unconscious cerebration,' and that Leibniz "instituted an analogy between the relation of kinetic energy to tension (potential energy) and the relation of the conscious to the unconscious," and summarises his own position in the words: "Psychology

<sup>1</sup> *Psychology*, pp. 19-23.

<sup>2</sup> *Psychological Principles*, p. 2.



is on secure ground only when it confines itself to the clear and certain phenomena and laws of consciousness. But starting from this standpoint, it discovers the unconscious, and sees to its astonishment that psychological laws prevail beyond the province of conscious life<sup>1</sup>. Secondly, it is at least open to question whether the Freudian 'mechanisms' are in any sense peculiar to the Freudian 'unconscious.' Crosland, on the basis of experimental work, puts it thus: "All the four so-called 'dream-mechanisms,' namely, the mechanisms of condensation, displacement or transposition, dramatisation and secondary elaboration...we have found to be present in ordinary everyday acts of recalling learning materials after various degrees of forgetting have taken place...we believe that, at bottom, dream images and images of ordinary, everyday recalls, after much forgetting has occurred, are much alike and have much in common. We have found no reason for asserting that repression played even the most insignificant part in the forgetting of the various materials employed in our investigation;—the phenomena of forgetting furnish us not one single trace of the influence exerted by repression...<sup>2</sup>." While thirdly, 'unconscious processes' are not facts in the sense that our author speaks of the "facts of consciousness" (p. 3): they are not phenomena. The so-called 'facts' of the unconscious are phenomena of consciousness or phenomena of behaviour, which latter, it must be remembered, are unknown except as phenomena of consciousness. To explain these phenomena the hypothesis of an 'unconscious' has been propounded. The 'unconscious' is, in fact, in exactly the same position as 'free-will,' the 'ether' and 'matter': each gathers up in a convenient 'name' an attempt at the explanation of certain phenomena.

R. J. BARTLETT.

*The New Psychology and the Teacher.* By H. CRICHTON MILLER, M.A., M.D. (Edin. and Pavia), Hon. Director, Tavistock Clinic for Functional Nerve Cases. London: Jarrolds, Ltd., 1922, pp. 232. Price 6s. net.

This volume, based on a course of popular lectures delivered at the Tavistock Clinic, is addressed primarily to teachers; and to teachers it will bring a strong appeal. The mind of the teaching profession has in the past been largely prejudiced against the doctrines of the earlier psychoanalytic schools, not so much by any scientific shortcomings in the evidence upon which those doctrines rest, as by the rough crudities of American and Continental expositions, and by what seems to many a cynical philosophy of materialistic fatalism, implied in the postulate of determinism. In Dr Crichton Miller's book there is nothing that is harsh. On the contrary, it will instantly win the lay reader by the lucidity and charm of its literary style, and by the tactful tone of humane and refined idealism pervading his whole treatment. There must, indeed, be many who will find themselves in sharp disagreement with the sketch of analytical psychology here presented; and who will perhaps feel that the writer is sometimes vague where he should be precise, and that, for clarity, he has sometimes been dogmatic, where existing knowledge warrants little but conjecture. But such criticisms are seldom helpful; and generally

<sup>1</sup> *Outlines of Psychology*, ch. III.

<sup>2</sup> *A Qualitative Analysis of the Process of Forgetting*, Psychological Monographs, xxix. 1, 1921, p. 71.



excite a suspicion that the critic is a rigorous adherent of one school, while the writer criticised favours another school, or is seeking to be impartially eclectic.

In his introductory chapter Dr Crichton Miller rightly disclaims for his teaching the title of psychoanalysis. Freud's discoveries, he owns elsewhere, "place him among the world's greatest pioneers." But Dr Miller finds himself "unable to accept all the conclusions of the Freudian theory." "The philosophy of free will implicit in all Jung's work" seems to him a more fruitful working basis. He is ready to "grant that the sense of spontaneity in human life may be an illusion"; but, if so, "it is an illusion which the writer believes that all educationalists would do well to cherish very jealously." In this sentence is to be found the key to Dr Miller's own scientific (or, as his opponents may consider, unscientific) position and outlook.

In his firm stand for individual liberty, for spiritual freedom, he is at one with all that is best and strongest in the current educational practice of today. And, in addressing the modern teacher, he has this further advantage: to a professional body who are, first of all, artists in human nature, and only secondarily, and too seldom, its scientific students, the creative, forward-looking view-point of the Zürich school inevitably appeals more powerfully than the cold, unsentimental view-point of Vienna, with its probings into the past and its siftings of the unseemly.

With great skill Dr Miller has singled out from the doctrines of analytical psychology the particular points of first importance for the teacher's comprehension; and even the analyst who differs from the standpoint that he has adopted, must agree that they are, every one of them, problems of which the teacher should at least be aware.

Dr Miller offers no encouragement to teachers to assume the functions of the psychoanalyst, or to explore the unconscious motives of the pupils in their charge. Rather he believes that the first service analytical psychology can render is to help the teacher to free himself, and his own intellectual processes, from all emotional bias and repression. As regards the children, it can help the teacher, he considers, to foster their mental development in three chief ways—by improving the child's adjustment to reality, by improving the child's adjustment to authority and to what is called "the herd," and by giving suggestive indications for his better enlightenment upon the difficulties of sex. With these several problems the successive sections of the book are principally concerned; and the whole concludes with a chapter, all too brief, upon the educational methods that follow as corollaries from the doctrines he describes.

That upon psychoanalytic issues there are other views than those which Dr Miller advances, the reader is sufficiently warned. But it is not, I fancy, made equally clear that the outline offered of the child's emotional development refers mainly to a strictly limited group, children of the public school class. The emotional life of the public school boy is not typical, but exceptional. He deserves study and discussion; but he is not the sole representative, perhaps he is not the best representative, of the natural unfolding of the mind. The children with whom the great mass of teachers have to deal are of a very different order; and to the development of the child in the elementary schools Dr Miller's schematic generalisations, without much modification, would hardly apply. He gives, for example, two ingenious geometrical diagrams, depicting the rotation of emotional phases in boys and girls respectively. The scheme for each is exquisitely simple. The teacher is shown

that the boy's chief interest centres from age 0 to age 8 upon his mother; from age 8 to age 12, upon his father; from age 12 to 18, upon his school-fellows; and from age 18 onwards, upon his mate. That the vast majority of boys in this country cease to have school-fellows at the age of 14, and that long before the age of 18 they have acquired an interest in the opposite sex, seems hardly recognised by such a scheme. With the girl, we are told, the two homo-sexual phases emerge first of all, and are more protracted, while the two hetero-sexual phases follow afterwards. From age 0 to 10 her chief attachment is to her mother; from 10 to 15, to her school-fellows; from 15 to 18, to her father; and from 18 onwards, to her mate. "It is during the third phase," says Dr Crichton Miller, "from 15 to 18, that the part played by the father in the girl's development becomes most crucial." Of what he terms "the public school girl" this may or may not be true; but it hardly holds of the vast majority of girls who need psycho-analytic study and treatment. For these it would seem more in accordance with published investigations, to place the crucial influence of the father at the opposite end of the scale, namely, during the pre-school instead of the post-school epoch, or, in other words, the very first years of life; and to claim that, in hetero-sexual development, they are more, not less, precocious than their brothers.

But to multiply petty comments of this type would be as easy as it is ungrateful. All such reflections are, indeed, disarmed by the fact that Dr Miller has not set himself to compile a scientific treatise, but is making a popular appeal to the lay educationist and to the cultured parent. And in this he must admirably succeed.

CYRIL BURT.

*Foundations of Psychiatry.* By WILLIAM A. WHITE, M.D. (Nervous and Mental Disease Monograph Series, New York.) Pp. ix+136. \$3.00.

In American psychological circles there appears to be no "mean"; the field is divided into sheep and goats by the steepest of gulfs. This simplifies the study of it very much, and more especially when, as at the present moment, we have to examine the good psychologists only. The value of these good psychologists lies not so much in original thought; their new contribution to all present day psychology is rather a synthesising of all known facts and theories, and a delineation of various principles deduced from such synthesis. This is a contrast to English psychology—where each of us sits inside a little ring of autistic fantasy—so marked that the best service that can be done for English readers is to lay the most particular emphasis upon it.

Dr White is to be considered as amongst the leaders of these synthesisers, who are neither Freudians, Adlerians, Jungists, McDougallites, Riverites, or anything else that bears a label; and indeed a search for truth should be unlabelled. Dr White has reverted to that oldest and best of terms, psychiatry, and has attempted an outline of the foundations of this science that is truthfully heroically objective. European, and especially English, psychologists, must mark this. His first four chapters deal with the unity, dynamics and stratification of the human organism; he continues with psychopathology and therapeutics, and concludes with the social problem. The gist of his thesis is contained in a statement that man is "a problem in energetics and his successes, failures, and compromises indications of the way in which he has been able

to utilize the life forces." There remains to be added to this that it is the "life forces" that most usually utilise man, *i.e.* man is a transmitting station for them, and we have a real foundation for the study of psychology and psychiatry. Again, Dr White says "a pragmatically teleological attitude is necessary that attempts to understand what the organism is striving to bring to pass in order to adequately evaluate the forces and the tendencies found operating." That is the true scientist attitude *par excellence*.

The unity of the organism Dr White deals with under three headings of integration, structuralisation, individuation. This is an extension of Mr Holt's finely pragmatic conception of man as a specific response to environment. Dr White emphasises the observation that any response to environment of an organism tends towards the creation in that organism of a "head end." We must criticise him for appearing here to wish to regard man as he is as a whole; whereas man is at least three wholes, instinct, emotion, intellect. Possibly Dr White, while writing, had in mind some theoretically harmonious state of psychological functions. That, however, is a fall from his pragmatic attitude. Here we may also remark that he does not lay very much stress on that most important problem for psychology, the various types of man. In work on this point Europe can turn the tables on America.

When he deals with the dynamics of the organism, he confines himself to the statement of action and reaction as equal and opposite and at the bottom of all phenomena, the organism included. But this is to regard life as static as Buridan's ass between the two bundles of hay. Postural tone of extensor and flexor muscles keeps the hand in a given position—that is action and equal and opposite reaction. But yet a third factor produces a change in this given position, the dynamic necessity of life itself. This is not merely dialectics, as Dr White will realise if he looks again at the examples that he offers himself.

Study of the stratification of the organism brings Dr White very close indeed to a conception of man as three in one, than which conception there can be no profounder foundation for any real psychology. He deals with a physiological stratum, instinct and metabolism; a psychological level, emotion and imagination; and a sociological level, which is sometimes, at any rate, intellectual. We may remark in passing that theories on which he spends some pages, of the evolution of these levels are not of real value to the pragmatic psychiatrist, who must take man as he finds him now. Then we may go on to see that it is in his study of psychopathology that Dr White does his finest synthesising work, upon the various psycho-analytic, physiological and neurological theories. And finest of all is the foreshadowing of a synthesis between the views of Adler and Kempf. As Dr White points out, Adler provides a far more satisfying philosophy of psychology than does Freud, and one, we may add, that is perhaps at present more clear-cut than Jung's, while also implicit in Jung. Kempf, on the other hand, provides the organic foundations for this philosophy in a manner far more satisfying than Adler himself. There is a tendency among psychologists to study the personality make-up of man only. There is a tendency among neurologists and physiologists to study his essential, or flesh and blood, make-up only. Actually the two must and should be studied together, as only then can be seen the whole man. This is a warning needed by both psychologists and physiologists; and Dr White is to be congratulated on having acted as the third factor in this action and reaction by indicating how to attain this synthetic view. The reader must go to Dr White's book for the full details of his speculations.

Finally Dr White deserves every praise for having set out so compactly the views of the best, the positive, element in the sphere of American psychology. The American psychology, as we have seen, stands chiefly for synthesising and correlating facts and theories in themselves so one-sided as to be lop-sided. And the guiding principle in its method, first formulated by Mr Holt in *The Freudian Wish*, is to ask simply and dispassionately (*i.e.* objectively)—*what* is the organism under study doing? Than this question there is only one more pertinent that the observer can ask, and that is—what is *he* doing himself? Dr White sees this, escapes the trap of observation of objectivity through subjectively coloured glasses, and lays right emphasis upon the primary necessity of self-observation. Here we can take a real lesson from the Americans, for how many professed psychologists in this country are there not who scarcely even dream of asking—what am *I* doing? It is so much easier to ask—what is anything rather than myself doing! Yet it is literally true that until *that* is known, nothing can be really known.

J. A. M. ALCOCK.

*Suggestion and Mental Analysis.* By WILLIAM BROWN, M.A., M.D. (Oxon.), D.Sc., M.R.C.P. (Lond.). University of London Press, Ltd. pp. 165. Price 3s. 6d. net.

Dr Brown's writings on therapeutics give us an impression of haste and hurry. He touches on many topics but he does not rest anywhere for very long. In this small volume of 165 pages he attempts to deal with the whole subject of suggestion and mental analysis ("including the special Freudian system of psycho-analysis") and at the same time he devotes 40 pages to a consideration of "The Philosophical Background." This takes the form of a discussion and criticism of Bergson's metaphysical system and of his theory of the relation of mind to brain.

In a book which professes to give an elementary and non-technical account of the relation between suggestion and mental analysis we should hardly have supposed it to be necessary or advisable to enter into the philosophical problems related to psychotherapeutics and psychopathology. The endeavour to deal with so many topics in such a small book inevitably leads to a fragmentary and unconvincing treatment of many important questions; and Dr Brown will perhaps pardon us if we express the hope that he may soon have sufficient leisure to give us that full and reasoned presentation of his views which his position in English Psychology entitles us to expect from him.

What is said about mental analysis in this book is so superficial and so fragmentary that criticism is hardly called for; but suggestion and hypnotism are dealt with in more detail and some views are expressed which cannot be allowed to pass unnoticed.

Dr Brown's views on hypnotism carry us back to the days of the great controversy between the Nancy and the Paris schools,—a controversy which we had thought had been settled by the work of the followers of the Nancy school throughout the world. As a result of his experience in hypnotizing five or six hundred patients out of about six thousand shell-shock cases seen by him during the past few years, Dr Brown has "come to the conclusion that Pierre Janet is absolutely right when he says that only the hysteric can be deeply hypnotized and that hypnosis is an artificially produced hysteria" (p. 56).



He also agrees with Janet "that the word should be limited to the production of artificial somnambulism" (p. 56). Having thus restricted the meaning of the term hypnosis it is obvious that he must also agree with Janet in maintaining that Bernheim and his followers (when they said that anyone who fails to hypnotize 90 per cent. of his cases does not know his work) were "calling by the name of hypnosis something which is rather different." This is no doubt true, for hypnosis is something more than the reproduction of a hysterical somnambulism in a hysterical subject; but we may ask, What justification has Janet or any one else for confining the use of the term hypnosis to cases of artificial somnambulism or for declaring that these are always reproductions of hysterical somnambulisms? Hypnotic somnambulism is merely a stage or phase of hypnosis, and hysterical somnambulism is merely the kind of somnambulism that occurs spontaneously in hysterics. That the dissociation in hypnotic somnambulism and in hysterical somnambulism is similar in degree may be admitted, but the mechanism of its production and the resulting phenomena are different in the two cases. It is true that the reproduction of a hysterical somnambulism may be brought about by the use of the same measures as are used in the induction of hypnosis; but when this occurs we are dealing with a hysterical rather than a hypnotic somnambulism.

Dr Brown says, quite truly, that in cases of shell-shock, seen immediately after the shock has occurred, where there is amnesia and dissociation, one can almost always hypnotize one's patients. In these cases the induction of hypnosis is a very simple matter and is, without any doubt, the reproduction of a hysterical somnambulism; or, as Dr Brown says, these patients are already 'hypnotized' and all that is needed is to get *en rapport* with them. But he also says: "in the large majority of cases the patients seemed to be naturally predisposed to hysteria, but to have been quite healthy before the shell-shock" (p. 63).

Now, what would have happened if Dr Brown had tried to hypnotize one of these patients *before* the shell-shock? Would he have been able to induce hypnosis—in the form of an artificial somnambulism followed by post-hypnotic amnesia? According to Dr Brown's own views this would not have been possible, because such a man would then have been "quite healthy" and would not have suffered from any hysterical somnambulism that could be reproduced. Yet, as a matter of fact, it is highly probable that in such a case hypnotic somnambulism could have been induced without much trouble; for the tendency to dissociation revealed by the shell-shock would have been available for the induction of hypnosis.

As if he had such a possibility in mind, Dr Brown asks: "Is it possible to make a person hysterical who is not so originally?" He is inclined to disbelieve it. We want to know, here, what is meant by "hysterical." Would a person who seemed "naturally predisposed to hysteria but... quite healthy" be described as hysterical? If so, "quite healthy" and "hysterical" are apparently not incompatible terms.

When Dr Brown asks the question, Is it possible to make a person hysterical who is not so originally, he really means, Is it possible to induce hypnotic somnambulism in a person who is not hysterical; for he accepts the view that if one "succeeds in producing the hypnotic state, then one has either to do with a case of hysteria or one has made the patient hysterical."

All this confusion arises from the practice of regarding hysteria and dissociation as co-extensive terms. This is the assumption that runs through the whole

of Dr Brown's argument, just as it is the assumption that invalidates Janet's conclusions. We may say that anyone in whom hypnotic somnambulism can be induced has, in a high degree, a tendency to dissociation, and a tendency to dissociation may imply a "predisposition to hysteria"; but neither before, nor during, nor after hypnosis need he be described as hysterical.

Dr Brown is apparently of opinion that his experience of hypnotism in shell-shock soldiers justifies his rejection of the whole of the conclusions of the Nancy school, and, in explanation of what he considers to be the errors of Liébeault and Bernheim, he says: "Up to the time of the war the number of typical hypnotic patients that any single medical man had the opportunity of seeing was comparatively small; thus there was a distinct tendency for his views to be biased by his own findings, and for his theory to be supplemented by statements that he found in books." It is perhaps nearer the truth to say that the medical man who, in general or hospital practice, used hypnotism in pre-war days had experience of a much greater variety of the kinds of person in whom a true hypnosis can be induced than was possible to those whose work was restricted to the treatment of the war neuroses. And if to be biased by one's own findings be a fault in a man of science, it is a fault that is more likely to be committed by the war worker than by the general practitioner who uses psychotherapeutic methods in his daily work. But to be biased by one's own findings is hardly reprehensible in a scientific worker unless such bias is the outcome of experience confined to a too limited portion of the whole field and leads to generalizations which are not warranted by an experience so restricted.

Dr Brown says further: "The large number of nerve cases produced by the war gave material of unrivalled excellence for the study of the phenomena of hypnosis, and some of us very quickly found that our practical experience was to a great extent at variance with what we had read." But this is what we should have expected; for although it is true that war cases afforded excellent material for the study of some of the phenomena of hypnosis, it is also true that war cases—or indeed any cases of neurosis—form too limited a field of observation if we are to arrive at sound judgments on hypnotic phenomena in all their aspects. If we study hypnotism in shell-shock soldiers only, our notions about it are likely to be as mistaken as were those of Charcot who studied hypnotism in Salpêtrière hysterics only.

T. W. MITCHELL.

*Taboo and Genetics.* A Study of the Biological, Sociological and Psychological Foundation of the Family. By M. M. KNIGHT, Ph.D., IVA L. PETERS, Ph.D., PHYLLIS BLANCHARD, Ph.D. London: Kegan Paul, 1921. Pp. 255. Price 10s. 6d. net.

The Preface to this book states very clearly the method of treatment adopted as regards division of material and authorship, and therefore a quotation will be useful. We read (p. viii, Preface): "The first part deals with the physical or biological basis of the sex-problem, which all Societies from the most primitive to the most advanced have had and still have to build upon. The second part deals with the various ideas man has developed in his quest for a satisfactory adaptation of this physical basis to his own requirements. Part three attempts to analyse the effect of this long history of social experi-

mentation upon the human psyche in its modern social milieu....It has seemed best to divide the treatment between three different writers, each of whom has devoted much study to his special phase of the subject."

It is obvious that a huge task is here indicated, and perhaps it is inevitable that this book with its three sections shall be somewhat lacking in exactitude, although always interesting and suggestive: indeed, three volumes, at least, would be necessary to deal adequately with such a theme as the authors have undertaken, but at all events this volume opens up broad vistas.

Part I (pp. 3-106), by M. M. Knight, Ph.D., entitled "The New Biology and the Sex Problem in Society," deals with such subjects as "Sex in Terms of Internal Secretions" (ch. i); "Sex and Sex Differences as Quantitative" (ch. ii); "Sex Specialization and Group Survival" (ch. iii); "Racial Degeneration"—involving a host of complicated problems. It is impossible in a small space to enter upon these in any detail: one can only point out that there are some useful expositions of the processes of sex-development from the biological standpoint, of sex in reference to internal secretions, of physiological sex differences, of inter-sexuality, of the functional-reproductive period and the problems relating to it, and often some valuable suggestions and warnings. In illustration of the latter, a passage from p. 15 may be quoted: "The social problem of sex consists of fitting the best possible institutions on to the biological foundation *as we find it in the human species*. Hence all our reasoning about which institution or custom is preferable must refer directly to the human bodies which compose society. We can use laboratory evidence about the bodies of other animals to help us in understanding the physical structure and functions of the human body; but we must stop trying to apply the sex-ways of birds, spiders or even cows (which are at least mammals) to human society, which is not made up of any of these." Surely a most timely warning to many of our present-day sociologists and experimental psychologists! As is perhaps inevitable, many views are put forward concerning which there will be wide differences of opinion. The conclusions drawn often seem too hasty, at all events insufficient data are furnished, in many cases, to warrant such conclusions: as illustrations may be cited, the summing-up of reproduction as, "a group, not an individual, necessity," the minimizing of the importance of natural selection, the demand for the production of numbers (of births). Concerning the last-mentioned matter, we read: "within nations, some racial and religious groups outbreed others and thus gradually supplant them—for the future is to those who furnish its populations" (p. 94). We have no guarantee, and past history does not substantiate such a theory, that the production of the largest numbers, as such, is the factor which enables nations to hold their own against competitors. Perhaps the chief defect of Section I is the ignoring of the psychological issues *in connexion with* the biological and sociological, even though in Part III the more specifically psychological side is treated. A more useful method would have been to take all three aspects in close connexion, and had this been done, the conclusions laid down with such conviction in Part I would often have been quite otherwise, or at least considerably modified.

Part II, "The Institutionalized Sex Taboo" (pp. 108-205) by Iva Lowther Peters, Ph.D., deals with such topics as "The Primitive Attitude towards Sex and Womanhood" (ch. i); "Woman as Saint and Witch" (ch. ii); "The Dualism in Modern Life" (ch. iii); "The Institutional Taboo" (chs. iii and iv). As in the case of Part I, but to an even greater extent, a vast mass of material

is brought forward and somewhat lightly and slightly touched upon, but (as before) a suggestive survey is made. A fairly pronounced feminism can be traced in this section, as in the others, and to some extent influences and biases the conclusions drawn, especially in respect to the problems of woman's sphere of work, her power to compete with man, and prostitution. Here, and in other places of the book, the theories of Freud are referred to, and seemingly accepted: hence it is curious to find also an adherence to Jung's and Adler's — a catholicism of outlook which hardly seems quite scientific, or even consistent. It may be noted in passing that 'Rationalization' is used by the author of Section II in a sense which does not accord with psycho-analytic usage; an instance of this can be found in ch. III, p. 180, where 'Rationalization' seems to indicate a point of view based on objective reality, which is exactly what it is not: it is an attempt to account for, and justify, unconscious motivation by seemingly 'reasoned' causation.

The third, and last, section of the volume—"The Sex Problem in the Light of Modern Psychology" by Phyllis Blanchard—will probably be the one most interesting from a general and popular point of view, but has less value for the student, since it deals in too cursory and superficial a way with the complicated issues involved. The three chapters which make up the section are as follows: "Sex in Terms of Modern Psychology" (ch. I); "How our Institutions fit Individual Sex Psychology" (ch. II); and "Dysgenic nature of certain Factors of Sex Psychology," and in all of them we have matters of undoubted interest discussed in an interesting way; yet the value of the material is often lowered owing to hasty generalizations and even erroneous statements. As an example, we read on p. 227 as follows: "The sexual life of woman is in many ways more complex than that of man. She has been subjected to more repressions and inhibitions, and as a result there has been more modification of her emotional reactions in the field of love. This greater complexity of her love-life makes adaptation to marriage more problematical in the case of woman." That there is some measure of truth in the above, as regards the physiological and more external aspects, no one will deny, but the psychological side appears to be ignored. There is much evidence that psychologically the sexual life of man is more complex than that of woman, and certainly subject to more complications: indeed, in an earlier section of this volume it is pointed out how large a part dissociation plays in the sex-life of man, and this fact alone creates a complexity for him which is far less operative in the case of the woman's sexual development. On such questions as 'eugenic ideals,' the individual and the group, the desirable basis of sex-love, many sweeping statements are made, sometimes very much in opposition to the conclusions derived from psycho-analytic research. The book may be regarded as usefully suggestive for those who have knowledge of the subject already, and in so far it serves a purpose.

BARBARA LOW.

*A Psychoanalytic Study of Psychoses with Endocrinoses.* By DUDLEY WARD FAY, Ph.D. Nervous and Mental Disease Publishing Company, New York and Washington, pp. 122.

This book does not add to our knowledge of either psychiatry or endocrinology. The author has had access to the mental patients at St Elizabeth's



hospital and has selected those which presented features of endocrine excess or defect—mostly hypo- and hyperthyroidism. Mentally the patients were mostly schizophrenic.

Appropriate endocrine extracts were administered and physical improvement was temporarily effected. A certain amount of psychoanalytical investigation was also carried out, but not enough to effect much mental improvement.

In each case the association of psychosis with endocrinosis appears to have been incidental or accidental and no causal relationship was established. Nevertheless, the case histories (22) are well recorded and the psychoanalytic discoveries are interesting.

W. H. B. S.

*Instinct and the Unconscious.* A Contribution to a Biological Theory of the Psycho-Neuroses. By W. H. R. RIVERS, M.D., D.Sc., F.R.S. Cambridge University Press. Second edition, pp. viii + 277. Price 16s. net.

The first edition of this important book was dealt with at length in a Critical Notice which appeared in Vol. 1, Part 2 of this *Journal*. In the preface to the second, revised edition, the author states that few changes have been made in the text, the most important being connected with the topic of dissociation, the result of criticism by me in the notice referred to above. Besides these changes, however, two new appendices have been added. One of these is the address on "Psychology and the War" delivered by Dr Rivers in his capacity of chairman of the subsection of Psychology at the Bournemouth meeting of the British Association in September, 1917. The other is a paper on "The Instinct of Acquisition" contributed to the pages of *Psyche*.

In our previous notice criticism was confined to certain details rather than to the more general bearings of the theory of the psycho-neuroses put forward in this book, and, although there is much in Rivers' views on the nature of the war neuroses which calls for criticism or comment, in view of his admission that the most important changes in the new edition are the result of criticism in this *Journal*, it will perhaps be well to confine this review to a consideration of the changes which have been made and of the extent to which the criticisms referred to have been met.

The gravamen of our complaint against Rivers' teaching concerning dissociation was that he restricted the use of this term to the independent activity of suppressed (repressed) experience—an activity accompanied by "consciousness so separated from the general body of consciousness that the experience of each phase is inaccessible to the other under ordinary conditions." That is to say, he refused to regard any splitting of the mind as a dissociation unless the split-off portion showed activity as an alternating 'independent' consciousness. He took fugue as the most characteristic example of dissociation; but although fugue exhibits the alternation and 'independence' of consciousness which he desiderated, it is not a very good example of the activity of repressed experience. A better example, to fit his definition, would have been the monoideic somnambulism which Janet takes as the prototype of all hysterical manifestations; but curiously enough Rivers excluded hysteria from the category of dissociation. He considered hypnosis to be a dissociation, however, because it is an alternating 'independent' phase of consciousness.

It is doubtful if Rivers ever really appreciated or believed in the facts of co-consciousness as these are described by Morton Prince. Certainly his use of this term seemed to imply a total misapprehension of Morton Prince's views.

In the chapter on Dissociation in the new edition the only changes made are the re-wording of a relatively unimportant sentence on page 75 and the substitution of 'Sally' for 'Miss' in reference to the appropriateness of the term co-conscious when applied to the Beauchamp case. But nothing short of a rewriting of the whole of this page could do away with the confusions contained in it.

On page 102, it is now said that the hypnotic state differs from a characteristic attack of dissociation or a fugue "in that it may be accompanied by memories from the ordinary waking state." The words quoted have been substituted for "in having been produced by the suggestion of another person."

On page 109: "the view that in the subject of a fugue the consciousness of one phase underlies the consciousness of the other phase," has been substituted for "the view that in a fugue the normal consciousness is there underlying the split-off consciousness accompanying the activity of the fugue."

At the foot of page 134: to the sentence ending "it is doubtful whether anything is gained by bringing hysteria within the category of dissociation," are now added the words, "at any rate so far as paralyses and anaesthesias are concerned." "I propose therefore to exclude dissociation from the connotation of hysteria" takes the place of "I have, therefore, no hesitation in excluding, etc."

These are practically all the changes connected with the topic of dissociation that I can find in the new edition, and I cannot admit that they meet, in any appreciable degree, the criticisms contained in my original notice; nor do they adequately represent the extent to which Rivers himself was convinced of the incorrectness of his views concerning dissociation. But it is plain that the changes he was able to make in the text were limited by the necessity for maintaining the integrity of each page so that the stereoplates could be made from the type as originally set up. The handicap which such a restriction imposes is well known to authors, and in the present instance I think it prevented Rivers from making corrections which (as he admitted to me in conversation) he saw were called for.

Dr Rivers' untimely death is an irreparable loss to the world of science; and its recency takes the heart out of any further criticism of this book which we might be inclined to make. *Instinct and the Unconscious*, though by no means the work on which his fame most surely rests, yet remains to us a striking example of the versatility and originality of his mind and of the wide range of his interests and knowledge.

T. W. MITCHELL.

## NOTES ON RECENT PERIODICALS.

*International Journal of Psycho-Analysis.* 1921. Parts 2, 3 and 4.

*Internationale Zeitschrift für Psychoanalyse.* 1921. Parts 2, 3 and 4.

An important article in the field of applied psycho-analysis written in English by that brilliant young worker in ethnology and allied subjects, G. Róheim, of Budapest, opens Part 2 of the *Journal* for 1921. "Primitive Man and Environment" is the subject of this paper, the aim of which is to show how the biological relationships between primitive man and his environment are reflected in the mental life of the individual. Totemism which postulates a magic bond between man and the animals, the idea of re-incarnation, nomadism, and the later tendency to settle and acquire personal property, cave-dwelling, tree-dwelling, the origins of social status, of cosmological theories, and of the ideas of heaven and hell acquire a remarkable unity and meaning in the light of the unconscious mental mechanisms and attitudes discovered by psycho-analysis, which predominate so greatly in primitive man. The conclusions here demonstrated by Róheim, without any forcible twisting of material or far-fetched interpretations, are not merely supported by a mass of scientific evidence derived from sources entirely independent of psycho-analysis or prior to it, but literally in many points actually coincide with it as far as it goes; the knowledge of the Unconscious merely makes it possible to correlate, and to clarify further, observations already established by previous workers. It is a fortunate circumstance that besides his natural gifts Róheim possesses a sound knowledge of psycho-analysis and an amazing grasp of the English language and familiarity with the wealth of English scientific literature on his subject. His cold and closely reasoned mode of presentation adds to the attractions of his work.

There is a point in common between Róheim's article and the succeeding one, "The Castration Complex," by Stürcke, different as it is in form and subject-matter. It deals with some of the remotest aspects of individual mental development; but the common point with Róheim's work is the inference both writers draw that "the wish-phantasies of the unconscious are ultimately repetitions of real situations" (in Stürcke's words), although in Róheim's work this inference refers also to real situations in phylogenetic, as well as in ontogenetic, development. The work of Stürcke will presumably only interest those already familiar with the important influence of the very earliest stages of individual life on the subsequent development of the libido. Close connections are here traced between the situation of the suckling infant when the mother's nipple is withdrawn from it, either before it is satisfied or during the process of weaning, inducing a sensation of loss and distress, and the later development of the idea of castration, by the association between nipple and penis now well established. The work is undoubtedly valuable and interesting, and is capable of throwing much light on certain types of neurosis.

There are two of this *Journal's* well-known Collective Reviews in this number: on Normal Psychology and on Mysticism and Occultism; also numerous book reviews.

The next number of the *International Journal* is a double one comprising Parts 3 and 4. It contains a translation of an article by Eisler, entitled "An Unconscious Phantasy of Pregnancy in a Man under the Guise of Traumatic Hysteria," which was already abstracted from the *Zeitschrift* for our readers in Vol. I, Part 2 of this *Journal*. Besides a very interesting analysis of a case, it presents some important theoretical conclusions.

There are also some remarks on "The Technique of Child-Analysis" by H. von Hug-Hellmuth, a well-known childrens' analyst. Many useful hints are contained in them; it is perhaps inevitable that the result should be a little disappointing. For the writer herself claims that 'intuition' is the chief guidance in these cases and that

almost every one requires different handling; perhaps it is as well that she lays down no golden rules, which might be only too lightheartedly misunderstood and misapplied.

"The Anal-Erotic Factor in Hindu Religion" is the subject of an interesting paper by Berkeley-Hill. He shows in a convincing fashion that the sense of guilt arising from this complex is the mainspring of the Hindu religion and that it has determined the national character and the social customs of the race. The pedantic reaction-formations against impurity and pollution are so severe that anything approaching sublimation has been almost entirely excluded; repression is so heavy that almost no energy is available for the demands and opportunities of reality, all is consumed in maintaining a mental equilibrium of a kind that in other peoples appears only in highly abnormal and neurotic individuals. In character-development and way of life the race has formed itself in the mould of a typical obsessional neurosis; a fact which throws light on the indifference to life observable in these people, and on their longing for Nirvana—existence without desire or feeling. Only so can the conflict be escaped, and just so, in proportion to the severity of their conflicts, do all neurotics crave to escape from life. It is unfortunate that the article does not end with the presentation of these interesting facts and that the author permits himself to go beyond the boundaries of psychology—to judge, to criticize and to compare the Hindus unfavourably with other peoples in respect of their type of mental development.

In a paper on "Psycho-Analysis and the History of Science" van Teslaar defines three stages in the development of science, which he terms atomism, energeticism, and unfoldment. He points out that unfoldment, or the concept of evolution, has by now influenced all sciences except academic psychology. Freud's work has at last placed psychology on a level with the other sciences in this respect, adding to it a genetic, developmental, evolutionistic point of view. "The details of Freud's work amount to a restatement of the recapitulation theory applied to the biologic history of the mind."

A short paper on the character-traits of Shakespeare's Shylock is quite unworthy of this periodical. The extent of Isador Coriat's knowledge of psycho-analysis seems limited to connecting love of money with coprophilia and hate with sadism. His theme is to prove that there is nothing specifically Jewish about the character of Shylock—a question of interest to certain individuals, perhaps, but one which concerns psychology only if it is connected with an investigation into the characteristic psychology of the Jewish race. This little matter the author completely overlooks, and indeed by implication he denies the existence of any such phenomenon as a characteristic Jewish psychology. It is regrettable that the *International Journal* should lend itself to the publication of a production, however insignificant, of no intrinsic value and plainly actuated by strong 'resistances' against personally disagreeable ideas.

"Psycho-Analysis and Psychiatry" is the title of an exceedingly interesting but difficult and obscure paper by Stäreke, not made more comprehensible by having been too hastily translated into English from the German of a Dutchman. An abundance of original ideas, an independent judgment, and the capacity for perceiving and bringing to light hidden connections are here brought to bear on this much more general subject, just as in the same author's article on the "Castration Complex"; both are the work of a mind which has freed itself from many inhibitions. There is in all Stäreke's work a note of enthusiasm and rebellion (to say nothing of his humour) which rings out arrestingly; at the same time there is in it an undertone of melancholy which comes to expression in an unfaltering acceptance of truth. Where his ideas will ultimately find their place we cannot tell, and while so much is speculative in the new science it matters comparatively little; we can but be grateful to those who are willing to throw some light, though it can only be a flickering and uncertain one, upon unanswered questions and unsolved problems—those who, as the author himself says, thereby forego the gratification which "non-analytical psychiatry finds in the compulsion to solve and finish with problems, even though the solution be illusory."

The renunciations in narcissistic gratification required by analytic work are becoming recognized; the author devotes the first part of his paper to a detailed



consideration of the forms they take. The phenomenon of "personal error," so important in other branches of scientific investigation, is shown to have been recognized at last, by psycho-analysis, as prevailing in an equal or even greater degree in the science of mind. Psychiatry and psychology have ignored it hitherto. The author hints further at some aspects of the new standard of human values which we may expect to arise from the new knowledge. "The old-style psychiatrist was a servant of the censorship, an instrument of society. The analyst has a more comprehensive duty to society, dictated by the same healing endeavour, but pointing in an opposite direction. He must reconcile society with the Libido, with death, in short, with the Unconscious." Something of this kind has often been said, but this writer has attempted to map out the narrow course through which, by abnegation and fortitude, this goal may finally be reached.

The second part of the paper is more technical, if not more speculative. It endeavours to trace the relations between the neuroses and the psychoses, and incidentally considers most of the normal forms of human life as well. Perhaps the author's earnest efforts in this section to steer a course between cynicism and idealism are the best evidence of the exceptional quality of his thought. Next, having attempted to show the forms of regression and fixation of Libido and their relation to the Ego-impulses in the various manifestations of human development, the author endeavours to trace a sketch of the development of the Ego-impulse and its paths of regression. Broadly, the function of the Ego-impulse is to arrest and control discharges of energy ("that which cannot postpone discharges evaporates and is destroyed"); its various stages of development and modes of functioning are enumerated and described. The relation of these stages to the development of consciousness and memory is also sketched. The final conclusion is that "the savage in us is not replaced by the civilized human being, but covered over by him as by a net. The primitive peeps through the meshes on all sides. (For instance, the 'epileptic,' convulsive character of many normal reactions, such as laughter, sneezing, outbursts of applause, etc., is pointed out.) In every stage of inhibition resounds a little of each stage that has been surmounted in the immeasurable past; the greater the share of the lower stages, the more the stages of rhythm and repetition etc. are contained in any one, the more unrestrained and profound a gratification it provides."

In 1919, for this paper and that on the "Castration Complex," Dr August Stäreke received from Professor Freud the prize founded by Dr Max Eitingon to be awarded yearly for the best work on medical psycho-analysis.

Among the shorter communications in this number is one from Ernest Jones upon an interesting device of the censorship in the dream-work. The history of an old man who was a patient in the wards of a general hospital, contributed by John Rickman, would be interesting and entertaining to any observer of humanity; in the light of psycho-analysis the unconscious meaning of his extraordinary story is plain, and we can even understand *why* it is so amusing. The pleasure-principle governs our unconscious minds and our chief pleasures are derived from the impulses and tendencies which belong there, or from the spectacle of them at work in others, whether we recognize them consciously or not.

A Collective Review of recent literature on the subject of "Sexual Perversions" is contained in this number, and several book reviews.

Of the *Zeitschrift* for 1921, Part 2 contains some interesting shorter communications, besides original articles appearing also in English in the *Journal*. Eisler describes the outbreak of an attack of manic excitement and the manifest ambivalence which showed itself in the symptoms. He finds that the case supports Freud's view that the striking symptoms of insanity constitute the attempts of the diseased mind to regain a state of equilibrium and that the ambivalence is made use of as a mechanism which may be suitably employed for this purpose. Feldmann, who also describes the onset of dementia praecox in three cases of men wounded or disabled during the war, was enabled, owing to the favourable circumstances of military service, to observe the gradual development of the disease and the conditions out of which it arose. Abraham describes two incidents, showing how a young woman suffering

from hebephrenia with a delusion of being robbed 'defrauded' herself by spending or hiding some money, in order to substantiate her delusion. A contributor offers an extract from a book of travel in Siberia, by Kennan, giving an account of an epidemic 'disease' prevalent in a certain district. Most of its victims were women; the symptoms took the form of a loss of consciousness, with a suddenly acquired facility for speaking unknown languages, in which the sufferer made known some unfulfilled wish. Her recovery could only be effected by fulfilling her wish, which usually took the form of a desire to possess something belonging to someone else. That this very frequent occurrence was a form of infectious illness the inhabitants unhesitatingly believed; the Russian governor of the district, however, gave it as his opinion that the patients required no treatment beyond corporal punishment. He said that a woman who wanted a new hat and failed to obtain it by the usual tormenting methods would produce a few convulsions and a song or two in a remote dialect in which she demanded the hat as a physiological need. One husband had to travel 300 versts in the depth of winter to obtain a silk dress which his wife demanded in this fashion. The author concludes that "in the light of these remarkable achievements of feminine strategy the women of America will have to admit that their Siberian sisters have succeeded far better than all the societies for women's rights in the art of getting what they want and throwing sand in the eyes of their lords and masters." Psychoanalysts at any rate will find the account amusing, and will see in it a new form of a psychological phenomenon common enough under the guise of a neurosis. The rest of the communications in this number are concerned with dreams, and include a very good example of the way in which something temporarily forgotten (in this case a dream) may be recalled through free association.

Among other original articles, Part 3 of the *Zeitschrift* for 1921 contains a discussion by Alexander of the points of view put forward by Freud in his recent work *Beyond the Pleasure-Principle*. He endeavours to show that the conception of what Freud there calls death-instincts and life-instincts, and describes as a speculative surmise, can be supported by deductive reasoning from biological and chemical facts. An article by Nunberg on "The Catatonic Attack," published in Part 1 of *Zeitschrift* for 1920, and abstracted in Vol. I, part 1 of this *Journal*, forms the basis of a further paper in this number on "The Course of the Libido-Conflict in a case of Schizophrenia." The attempts of the Libido to regain an object-investment, and so to detach itself from the narcissistic investment of the Ego characteristic of the psychoses, are here analysed and their various forms described. They were, first: To regain the object, (a) by the aid of speech, (b) by narcissistic identification carried out on the basis of anal, aggressive, and cannibalistic impulses. The failure of these processes to effect an object-investment and therewith recovery led to two further attempts: (a) an attitude of 'transitivism,' in which self and object were felt to be interchangeable and there was failure to discriminate between them, (b) projection and the feeling of being wronged and injured by the object. The latter was closely related to the transitivism, which mainly expressed negative impulses, and both represented the activation of the narcissistic omnipotence of thought. This also proving unsatisfactory, the patient finally succeeded in developing an object-attachment to the physician by identifying him with the father. A transition stage between the idea of being harmfully influenced and the object-investment was expressed by the wish to be hypnotized. A partial recovery became possible after the Libido could be again directed towards an object.

Eisler contributes to this number a long abstract of Freud's *Beyond the Pleasure-Principle*.

"Transference and Object-Choice" is the title of the article, contributed by Hattingsberg, opening Part 4 of the *Zeitschrift* for 1921. He discusses the usual assumption of the psychology of consciousness that feelings and affects are essentially connected with their objects, and arise in relation to their specific objects and not otherwise. This is directly controverted by experience with the phenomenon of transference in psycho-analytic treatment, where the affect arises irrespective of the

nature or specific character of the object. Freud's sexual theory accords with this experience and propounds a fundamental independence of their objects in the various instincts. (Instinct and affect are shown to be practically synonymous terms.) Interesting observations on very young animals made by Douglas Spalding and L. Morgan confirm this view. The reflex theory and the tropism theory of instinct being shown to be incompatible with all these observations the author endeavours to formulate a theory of the nature of instinct which shall correspond to the facts and explain their dynamics. He postulates a single primary instinct underlying all the recognized impulses (which are only isolated manifestations of it) which he calls an instinct of total surrender, of complete passivity. He maintains that this explains the phenomena of suggestion and suggestibility. The author's attempt to relieve psycho-analysis of the reproach of concerning itself exclusively with the *content* of mental operations, instead of with their general nature, is interesting and well-presented; but it goes rather to the other extreme in effect and is too vague to be convincing.

Under the title of "Psycho-Analysis and Psychiatry" Pollak describes a case of a man of 53, brought to an asylum and there diagnosed as suffering from a 'pre-senile delusion of suffering injurious treatment.' A short analytic exploration revealed an infantile attitude of mind, with a strongly developed narcissism, due largely to the circumstances of the patient's early life; and showed that an operation on the eye undergone some months before had so damaged the 'self-regarding' feelings that a severe reaction had set in, which was expressed in the form of such selfish meanness and exorbitant claims in regard to the persons of his environment that it became necessary for their comfort to transfer him to an institution. There was neither 'pre-senility' nor 'delusion' in the strict sense present. The case is an illuminating instance of the helplessness of academic psychiatry when confronted with a simple case, which in the light of psycho-analytic knowledge is easily intelligible. The dreams and phantasies of an epileptic, in which he saw himself as a spermatozoon in the father's body and lived through the process of generation again, are described by Muller and compared with other spermatozoon-phantasies recorded in the literature; he also relates them to the commoner phantasy of returning into the mother's body, which is of course also contained in the spermatozoon-phantasy. A young woman suffering from obsessional neurosis wrote an account during analysis of all the day-dreams she remembered having harboured up to her seventeenth year. They show a very interesting development as the censorship gradually increased; she herself invariably plays the part of the boy-hero, in the earlier ones in a markedly masochistic relationship to the father, later in identification with him. A disappointment in love experienced during analysis is described by Pfeifer, who would like to draw the attention of analysts to the problem of the effect of such experiences on the treatment. A cure of a childish phobia by what she calls 'rapid analysis' is described by Spielrein. The repressed wishes were very cleverly brought into consciousness by a game, after which the symptom disappeared; the question remains how far their pathological potentiality had been removed. Schneider gives an account of a book by Staudenmaier of Munich, entitled *Experimental Magic*. Becoming interested in spiritism, the author had the notion of attempting to induce mediumistic phenomena in himself, in order to investigate them scientifically. With patience and practice he acquired various facilities and eventually succeeded in raising the repressions sufficiently to make his own unconscious accessible, in the form of hallucinations involving all the sense-organs. It appears that both in functions and in content these hallucinations expressed wish-fulfilments, and in respect of the aim with which they were provoked by the experimenter they served the purpose of a sublimation. They confirm the results of psycho-analysis concerning the content of the Unconscious, of which they were in one sense a kind of 'photographic reproduction.'

J. R.

*Annales Médico-Psychologiques*. (Series XII. Vol. I.)

No. 1, January, 1922.

*Chronique: Le décret du 3 janvier 1922* (Dr G. Demay).

The decree greatly improves the status of medical men on the staff of asylums.

*Rôle du tempérament et des idées délirantes de Rousseau dans la genèse de ses principales théories* (M. Victor Demole).

An attempt to answer the questions (1) Are the principal theses of Rousseau the outcome of his psychical constitution? (2) Did his delirious ideas influence his productivity in quality or in quantity?

*Etat de mal épileptique mortel au cours d'un traitement par le Gardénal* (M. L. Marchand).

In some cases Gardenal is not superior to bromides. Gardenal sometimes causes a grouping of attacks while giving at the same time lengthened periods of respite. More attacks better spaced are often better for the patient.

*Etats mélancoliques avec hypotension artérielle, traitement par l'opothérapie surrénale et l'adrénaline* (M. G. Naudascher).

Records of two cases of successful treatment and reference to others.

*L'Expertise mentale et la justice militaire. Les débiles et les dégénérés dans l'armée* (M. J. Hamel).

Army crimes and offences in relation to mental conditions both during and since the war.

*Traitement des ictus de la paralysie générale* (MM. Ducosté et Martimor).

Reports excellent results from subcutaneous injection of adrenalin.

No. 2. February, 1922.

*Chronique: A propos du concours de médecin en chef des usiles de la Seine* (Dr Henri Colin).

Criticises the methods of examination for asylum appointments and suggests alterations.

*Le syndrome de la paralysie générale* (M. Klippel).

Argues that even if it be admitted that syphilis is a cause it often is not the controlling factor in the development of the disease.

*Etude statistique de médecine légale psychiatrique militaire* (M. André Barbé).

A description of 195 cases showing 16 varieties of crime, 35 distinct types of mental trouble and 5 degrees of responsibility.

*Le principe de la présomption légale d'origine et les conséquences de la loi du 31 mars 1919 sur les pensions militaires* (M. Louis Parant).

Stresses the futility of a brief examination and argues that either a longer examination should be conducted or the onus of proof of aggravation of mental trouble by the war be put on the claimant.

*Troubles mentaux post-commotionnels* (M. G. Robin).

Discusses a case of shell shock.

*Intoxication mortelle (suicide) par ingestion de salicylate de méthyle* (Dr Legrain et Mlle Badonnel).

In view of this "regrettable accident" to a patient who had shown no symptoms of epilepsy, the action of the drug, especially on epileptic subjects, is discussed.

No. 3. March, 1922.

*Chronique: La pratique psychiatrique en Alsace* (Dr Paul Courbon).

Alsace is far ahead of France in the attitude of the law towards the control of treatment of mental disease.



*Contribution à l'étude de la conscience de l'état morbide chez les psychopathes* (M. G. Halberstadt).

The importance of knowing the extent to which the patient analyses the malady is discussed and illustrated by reference to a shock case discharged with a 50 per cent. pension who later demanded 100 per cent. in the erroneous belief that he was suffering from pulmonary tuberculosis.

*Les rémissions dans la paralysie générale (étude clinique et humorale)* (M. René Targowla, Mlle Badonnel et M. G. Robin)—concluded in No. 4.

Gives records of 15 cases and discusses the relation between syphilis and general paralysis emphasising the apparent independence of the progress of the symptoms of one and the other.

*Sur le traitement spécifique de la paralysie générale* (MM. Quercy, E. Roger et Diguët).

Gives seven cases of treatment and concludes that neosalvarsan has no action on the clinical symptoms and the course of general paralysis, and that while leucocytosis may disappear rapidly and completely under treatment it returns in a few weeks after the last injection and the disappearance is of no value in staying the course of the disease.

*Suites éloignées de certains troubles mentaux post-encéphalitiques* (Dr Henri Claude).

Four cases are discussed.

*Les hallucinations lilliputiennes. Essai d'interprétation* (M. Jean Salomon).

By hallucination the patient has a representation of an ordinary sized man at a considerable distance, but seeing the walls of his room at the same time he interprets the representation as proceeding from a *small* man at a *short* distance. This explanation is supported by the facts that these hallucinations nearly always happen in small enclosed places and in one case, when a patient saw the little men at different distances, those that were closest to him were the smallest.

#### No. 4. April, 1922.

*Chronique: Considérations sur la restriction des services d'aliénés de Bicêtre et de la Salpêtrière* (M. Raoul Leroy).

Laments the fact that, on account of financial considerations, the mental hospital of Bicêtre and the famous Salpêtrière are to be reduced to small "consultation services."

*Le projet Grinda et l'hygiène mentale* (Dr Legrain).

An interesting scheme for amendment of "the law of 1838" on the lines proposed by M. Grinda in 1921. It would place (1) a *clinique psychiatrique* and (2) a place of observation (*placements par mesure de précaution*) between the mental case and the asylum and provide a way out of the asylum through (1) convalescence, and (2) the clinic.

*Les rémissions dans la paralysie générale* (M. René Targowla, Mlle Badonnel et M. G. Robin).

See No. 3. above.

*Folie simulée chez un dégénéré inintimidable inculpé de vol* (Dr A. Prince).

Reports a case and argues that the man was incapable of social life and a problem, not legal, but medical.

*L'organisation du service libre de prophylaxie mentale de l'asile Sainte-Anne* (MM. Ed. Toulouse, G. Genil-Perrin et R. Targowla).

An account of the organisation of an out-patient service for mental cases followed by a long discussion in which opposite opinions as to the legal aspect of the project and its value are expressed.

R. J. B.

*Journal de Psychologie normale et pathologique* (XIX).

No. 1. January, 1922.

*Le poids de cerveau et l'intelligence* (L. Lapicque).

A historical sketch followed by discussion of formulae connecting the weight of brain with that of body and of the relation of "intelligence" to the weight of the brain.

*Religion et nationalité* (A. Van Gennep).

Discusses work of former writers and argues that religion gives strength to national feeling and that a church acts as an administrative and sentimental unifying force: it is one of the modes of expression of a social need.

*Psycho-pathologie de l'indécision* (D. Wechsler).

*Ambivalence* is a characteristic of normal and abnormal minds. Indecision in normal persons is analysed and the conclusion reached that indecision is due to the affective parts of repressed sentiments being attached to fortuitous ideas.

*En marge de la psychologie des larmes* (P. Morhange).

According to actors, tears are produced by them while acting in two ways; (1) They identify themselves with the character and actually feel emotion; (2) They control the physiological processes.

*Notes sur la psychologie de combattant* (R. Lacroze).

Details of immediate experience are important to the combatant but generalisations are not; thought is avoided and the critical sense is abolished. There are marked changes in the affective life including the disappearance of purely abstract sentiments.

*La Conférence de psychotechnique de Genève* (J.-M. Lahy).

Delegates from Spain, Belgium, Holland, Switzerland, Germany, America, Italy and France described the work being done in their countries in investigating the fitness of individuals for various occupations. Brief summaries are given.

R. J. B.













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